TALPI 2021 TEACHING & LEARNING POSTER IDEAS

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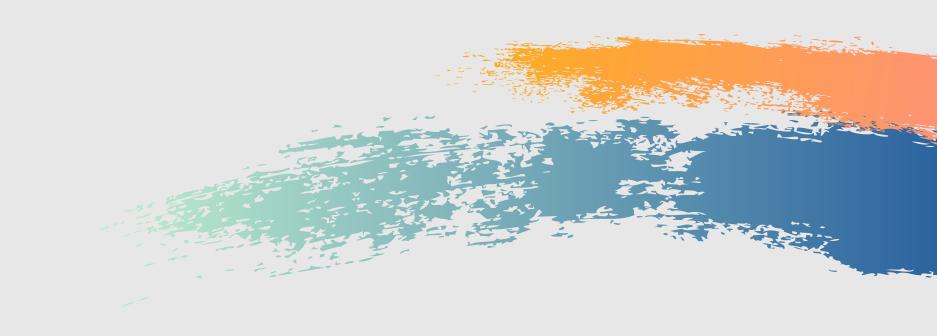
Teaching & Learning Poster Ideas (TALPI) 2021

Universiti Teknologi MARA Perak Branch

Dr Rafidah Abd Karim

Program Director

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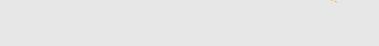
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PREFACE

Education cannot afford to be stagnant or continue with only what works. It must be willing to take risks and rise to great challenges. The ongoing COVID-19 pandemic is one of such great challenges of our time. The pandemic has highlighted the disparity between resources we can offer and the extraordinary level of developmental and humanitarian needs in our education system. Fresh, creative, and engaging ideas are needed to address this situation and limit the damage that this pandemic could potentially cause to our generation.

However, it is thought that the real challenge is not about coming up with new or novel ideas to address teaching and learning issues in this situation. Technological advancement has enabled abundance of them, even before the COVID-19 pandemic. And of course, everyone can offer something new, but not everyone can conceive ideas that speak to the soul of teachers and students in this unprecedented time and ideas that serve those who are under served by the current situation.

There are considerations that need be weighed in while conceiving these ideas. Ideas for instance should provide a window to the world when both the students and teachers are forced to be confined to their home due to lockdowns and stay-at-home orders. Ideas should make students feel that they are not by themselves in overcoming remote learning at home, where in-person guidance by their teachers is a privilege and no longer a right. Ideas should also empower students feel that they can achieve however little, regardless of the kind of devices they possess, the speed of internet they are being connected through, or the surrounding they have at home. Most importantly, ideas must always be inclusive and flexible so that they could work across situations.

This is where it is believed that the inaugural edition of TALPI2021 comes into the picture. This is where such ideas are celebrated and are being given a platform to be exposed to a wider audience. This exposure is essential to enable the ideas to be enhanced and improved before they hopefully are lifted to greater heights in the exciting journey to make the ideas happen. Scott Belsky, a famed American entrepreneur once said, "It is not about ideas, it is about making ideas happen". So, thank you for choosing TALPI2021 as the first step to make your ideas happen. We are incredibly thrilled to witness where the journey of making your ideas happen will take you.

Professor. Sr. Dr Md Yusof Hamid, AMP Rector Universiti Teknologi MARA Perak Branch









PREFACE

I am very thankful to Allah the Almighty for granting us, the Academy of Language Studies of UiTM Perak Branch specifically the opportunity to organise Virtual Global Education Events 2021 – an international webinar series and Teaching and Learning Poster Ideas (TALPI) 2021. We are extremely proud of this venture, which is a part of exciting projects between Universiti Teknologi MARA Perak Branch with Universitas Terbuka, Indonesia.

It is undeniable that education and innovations is a vital tool in preparing present and future generations to survive and thrive in the era of Fifth Industrial Revolution (IR 5.0). Hence, it is vital for the nation to have the necessary knowledge, skills, and values to face the challenges ahead-specifically in navigating the future of academia.

The Teaching and Learning Poster Ideas (TALPI) 2021 have provided the platforms for educators and innovators to share ideas and knowledge. From the TALPI 2021 competition submissions, we are impressed and excited for the future educators and innovators all over the world! Despite the pandemic, we are inspired by the participants for their creativity, hard work and commitment in TALPI 2021.

Therefore, I would like to extend my deepest thanks and appreciation to the amazing TALPI 2021 participants and committee members. Well done!

"Towards the New Realm of Innovative Teaching and Training 2021"- and beyond. We are ready for the exciting futures of education ahead!

Associate Professor Dr Nur Hisham Ibrahim Deputy Rector of Research Industrial Linkages, Community & Alumni Network Universiti Teknologi MARA Perak Branch









PREFACE

Ideas are essential. They are needed to allow progress to take place. Ideas will challenge the existing status quo, by offering perspectives that could improve a situation. When there are no ideas, we will remain stagnant in our comfort zone. Our life will be devoid of exciting innovation and creativity, and much of our development as human beings will be halted. Ideas are also important in filling the gap between something that is already working and how that thing could be made better. Look at the smartphone technology for example. Every year, smartphone manufactures work hard to outdo themselves in introducing new generations of smartphones, when we the consumers thought that the latest batch of smartphones is already the perfect one. This is where ideas come into the picture, by filling the gap between what have already been produced and worked well earlier and the next big smartphone's inventions to further satisfy consumers' everchanging demands. Ideas can also help us in dealing with issues surrounding our life. As ideas offer perspectives, they can solve issues in our life or at least limit the impact of those issues while they still linger around. What is more, they can transform an issue into a non-issue or eliminate the issue altogether by challenging our own assumptions about that issue, especially when ideas from others are sought for and included in the solution.

The reality is ideas are rejected all the time. But do not let rejection of your ideas dampen your spirit. It is not a bad thing; It is actually a wonderful thing if your ideas are being dismissed as it provides you with another opportunity and jolt to reconsider that ideas, which can only lead to a better and more improved version of that ideas. You certainly have nothing to lose, and everything to gainThe bottom line is ideas matter, whether they are big, bold, life-changing ideas, or simple, every day, easy to digest ones. Remember, some of the world's most successful products and services started off from quick flashes of ideas and inspirations. And at times, just having ideas is enough - you do not have to do the whole thing. There will be capable people who will see through the idea and make it happen.

Keep on having ideas. And congratulations to all of you who chose TALPI2021 to jumpstart your ideas. May this be the beginning of you making the world a better place, one idea at a time.

Professor Dr Othman Ismail
Dean,
Academy of Language Studies
Universiti Teknologi MARA Shah Alam









PREFACE

TALPI 2021 competition provides a platform for professionals, academics, and students from all over the world to present and share their innovation ideas on teaching and learning. Its success is reflected in the poster presentation videos received, with participants coming from Malaysia and Indonesia, allowing a real multinational exchange of experiences and innovation ideas.

Universitas Terbuka, Indonesia is glad to be the collaborator for this event in addition to our successful completed projects during the last few years of this collaboration. I would conclude by expressing my sincere thanks to Universiti Teknologi MARA Perak Branch for choosing us as the MoU collaborator and for their various effort to bring this competition to the international level that benefits the society at many levels. This competition can only succeed as a team effort, so as the collaborator I want to thank the TALPI committees for their excellent work in becoming the judges and reviewing the abstracts as well as their invaluable input and advice.

We therefore look forward to our long-term collaboration between our universities and two countries, Malaysia and Indonesia. I hope the TALPI participants had an interesting and fruitful idea sharing competition.

Thank you.

Dr. Ucu Rahayu, M.Sc.
Dean,
Faculty of Teacher Training and Education (FKIP)
Universitas Terbuka, Indonesia









PREFACE

Praise be to the Almighty Allah for granting us the strength, endurance and strong commitment to undertake the task to organise the Teaching and Learning Poster Ideas (TALPI) 2021 competition. We are extremely proud of this successful project-which is one of the many exciting ventures between Universiti Teknologi MARA Perak Branch with Universitas Terbuka, Indonesia.

There is no doubt that education plays a vital role in shaping up the people's lives and their careers. In fact, education shapes up the whole world. In navigating the exciting futures of education in the era of Industrial Revolution 5.0 (IR 5.0), the world is fast changing due to the rapid development of Science and Technology, new methodologies, approaches, and strategies in education must be developed and adopted to meet the current requirement. Through innovations, we could improve the standard practice in teaching and learning and elevate these skills to achieve greater learning outcomes to support the demands of Education 5.0. Hence, academician should engage themselves more actively in research activities and innovations to support the present and futures of education.

Indeed, I strongly believe that from these events, the participants would generate new knowledge and ideas as well as benefit new experience to better equip themselves as the educators of the present and the future.

On behalf of UiTM Perak Branch and Academy of Language Studies, my heartiest appreciation and congratulations to all participants, winners and organising committee members. Also, my well wishes to those who have directly or indirectly contributed to make the event a success. May God bless us all.

Dr. Puteri Rohani Megat Abdul Rahim Head of Academy Centre, Academy of Language Studies, Universiti Teknologi MARA Perak Branch









PREFACE

I take this opportunity to welcome everyone to the abstract book of the Teaching and Learning Poster Ideas (TALPI) 2021 competition being hosted by the Academy of Language Studies, UiTM Cawangan Perak, in collaboration with Universitas Terbuka, Indonesia and the UiTM Global as the strategic partner. This digital abstract book contains abstracts and posters submitted in conjunction with Teaching and Learning Poster Ideas (TALPI) 2021 competition. As the program director of this event, I greatly appreciate the TALPI committee members and Universitas Terbuka, Indonesia, for making this collaborative effort a success. We together will pursue this and more international educational events in the future.

TALPI 2021 is organised for the first time this year on the virtual platform. This competition is established to bring together academics, professionals, practitioners, and higher learning institutions and school students from Malaysia and international to present their innovation products and posters in teaching and learning.

Throughout the world, nations have started recognising digital technology, which is now acting as a catalyst in ensuring teaching and learning activities occur despite the Covid-19 pandemic that has been around for over two years. It is relevant in the substitution of physical platforms, but digital technology's recent innovations help in efficient classroom management, learners' empowerment and in improving the quality of teaching and learning. Considering this, the theme, digital technology is emphasised in this competition without neglecting the non-technological methodology and pedagogy that are relevant and timely, even now.

This book represents another space for stimulating sharing of ideas about current trends of innovations in teaching and learning that our selected participants contribute. The compilation of significant innovation products in this abstract book represent research from all over Malaysia and Indonesia. I hope that the participants have a stimulating and enjoyable competition.

Thank you.
See you again!

Dr. Rafidah Abd Karim Program Director, Teaching & Learning Poster Ideas (TALPI) 2021, Universiti Tekmologi MARA Perak Branch

INO-B:Suku Kata Bahasa Melayu

Goh Kok Ming

SJKC Chi Sheng 2, Perak

Emel: kokming888@gmail.com

Abstrak

Kajian ini dijalankan bertujuan untuk mengatasi masalah murid dalam menyebut perkataan KV+KVK dengan menggunakan aplikasi Ino-B:Suku Kata Bahasa Melayu. Reka bentuk kajian yang dipilih adalah berdasarkan model Kurt Lewin (1946). Seramai 2 orang responden telah dipilih dan terlibat dalam kajian ini. Hasil daripada tinjauan awal yang telah dijalankan, maka pengkaji mendapati bahawa terdapat sebilangan murid tahun 1 mengalami masalah dalam menyebut perkataan KV+KV. Atas kesedaran ini, maka pengkaji menjalankan kajian dan berpendapat bahawa masalah ini dapat diatasi melalui aplikasi penggunaan Ino-B:Suku Kata Bahasa Melayu. Ino-B:Suku Kata Bahasa Melayu merupakan sebuah aplikasi pintar yang menggunakan teknik menggabungkan kaedah permainan bahasa dengan kaedah fonetik dalam pengajaran dan pembelajaran bagi kemahiran menyebut bunyi suku kata perkataan. Instrumen yang digunakan untuk mengukur kajian ini antaranya termasuklah pemerhatian secara berstruktur, soal selidik, rakaman video, ujian diagnostik dan ujian pencapaian. Dapatan kajian ini membuktikan bahawa aplikasi penggunaan aplikasi Ino-B:Suku Kata Bahasa Melayu berkesan untuk mengatasi masalah subjek dalam menyebut perkataan KV+KV dengan betul,jelas dan lancar. Justeru, pengkaji yakin bahawa aplikasi Ino-B:Suku Kata Bahasa Melayu perlu diperluas penggunaannya dalam pengajaran dan pembelajaran bagi kemahiran menyebut perkataan.

Kata Kunci: Ino- B , suku kata, Bahasa Melayu, murid

INO-B:Suku Kata Bahasa Melayu

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



ABSTRACT

This study aims to address the problem of students in pronouncing words using the Ino-B: Suku Kata. The selected study design was based on the model of Kurt Lewin (1946). A total of 4 respondents were selected and involved in this study. As a result of the initial survey that has been conducted, the researcher found that there are a number of students in Year One have problems in pronouncing Suku Kata (word). Realizing this, the researchers conducted a study and believes that this problem can be solved through the application of Ino-B: Suka Kata. Ino-B: Suka Kata is a Android application that uses a technique of combining methods of language games with phonetic method of teaching and learning of the skills mentioned sound syllable words. Instruments used to measure this study include structured observations, questionnaires, video recordings, diagnostic tests and achievement tests. These findings show that the application of the Ino-B: Suku Kata is effective in aiding subjects in pronouncing the words correctly, clear and smooth. Thus, the researchers believe that the application Ino-B: Suku Kata has expanded its use in teaching and learning to pronounce the word skills.

1.0 OBJECTIVES

- Helps students spell and read closed two-syllable words based on letter sound recordings.
- 2. Increases students' self-confidence to read closed two-syllable words.
- 3. Increases students' self-confidence to read closed two-syllable words.

2.0 DESIGN OF INNOVATION Phase 3

Phase 2
Developing
Implementing

Evaluation

3.0 NOVELTY

- 1. Less digital application was developed for catering the needs of rural area students with low-bandwidth internet connectivity area.
- 2. This application was designed, developed and implemented to help and facilitate student home based learning (PdPR) during school closures, especially the minor group of students.
- 3. It was developed based on the coding knowledge of innovators using appinventor.
- The application of intellectual property is under progress due to MCO was implemented.

4.0 ADVANTAGES/USEFULNESS

- 1. Self -paced and interactive learning can take place.
- 2. Fun and meaningful learning can be created.
- 3. It can be installed in smart phones easily.
- 4. It is user-friendly and high effectiveness of home based learning among students.
- 5. It is suitable for low-bandwidth area of students.
- 5. Student attendance has been increasing since the app is implemented.

5.0 COMMERCIALISATION POTENTIAL

- 1. Technology Aspect: Process suits the learning needs and skills required of school community.
- 2. Market Area Aspect: Economic, perception and market evaluation suits the
- 3. Policy/Curriculum Aspect: It is suitable with the policy and curriculum requirements.

6.0 PICTURES

7.0 ACHIEVEMENT/RECOGNITION

- 1. Gold Award MYSE 2021
- Gold Award MTSE 2021
 Gold Award 4th Advanced Innovation & Engineering Exhibition (AiNEX) 2021
- 3. Gold Award e-Seminar Penyelidikan dan Inovasi Dalam Pendidikan 2020 (e-SPeDIP2021) National Level
- Silver Award IABD 2021 (Seminar Kebangsaan Penyelidikan & Intervensi Amalan Bilik Darjah)

8.0 INVENTORS

- Goh Kok Ming (Ketua)
- 2. Saw Kee Yin
- 3. Beh Peck Nuy



The Use of Mudah.CS2 in Teaching and Learning Mathematics among Under-Enrolled School Students

Goh Kok Ming

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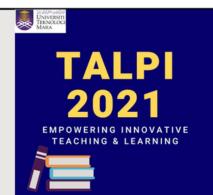
Abstract

The widespread prevalence of COVID-19 pandemic has affected educators and parents alike. Due to the sudden closure of schools, students are missing social interaction which is vital for better learning and grooming while most schools have started online classes. This has become a tough routine for the parents working online at home since they have to ensure their children's education. Thus, parents and students faced problems in following the learning timetable, especially for those in rural area. This smart application was developed to facilitate teachers, students and parents to attend online classes according to the PdPR 2.0 (Home-Based Learning) timetable based on MOE guidelines. This application was developed in Android version which can be downloaded and installed in smart phones. Through this application, tutorial materials and notes can be accessed easily and systematically according to subjects. Besides, parents can monitor their children's learning progression and attendance easily. Addressing these contextual challenges, it fulfils the requirement gap for remote learning.

Keywords: Mudah.CS2, Timetable, Teaching, Learning

The Use of Mudah.CS2 in Teaching and Learning Mathematics among Under-Enrolled School Students





ABSTRACT

The widespread prevalence of COVID-19 pandemic has affected educators and parents alike. Due to the sudden closure of schools, students are missing social interaction which is vital for better learning and grooming while most schools have started online classes. This has become a tough routine for the parents working online at home since they have to ensure their children's education. Thus, parents and students faced problems in following the learning timetable, especially for those in rural area. This smart application was developed to facilitate teachers, students and parents to attend online classes according to the PdPR 2.0 (Home-Based Learning) timetable based on MOE guidelines. This application was developed in Android version which can be downloaded and installed in smart phones. Through this application, tutorial materials and notes can be accessed easily and systematically according to subjects. Besides, parents can monitor their children's learning progression and attendance easily. Addressing these contextual challenges, it fulfils the requirement gap for remote learning.

1.0 OBJECTIVES

- 1. To facilitate the teaching and learning process among users (teachers, students and parents).
- 2. To increase student attendance during Home Based Learning (PdPR) during school closures.
- 3. To promote directed self-directed learning among students.
- 4. To encourage teachers to be content-creator.

Phase 1 Planning Phase 1 Planning Phase 1 Planning

3.0 ADVANTAGES/USEFULNESS

- Tutorial materials and notes can be accessed easily and systematically according to subjects – directed self-paced learning.
- Parents can monitor their children's learning progression and attendance from time to time.
- 3. It can be installed in smart phones easily.
- 4. It is user-friendly and high effectiveness of home based learning among students.
- 5. It is suitable for low-bandwidth area of students.
- 6. Student attendance has been increasing since the app is implemented.

4.0 NOVELTY

- 1. Less digital application was developed for catering the needs of rural area students with low-bandwidth internet connectivity area.
- 2. This application was designed, developed and implemented to help and facilitate student home based learning (PdPR) during school closures, especially the minor group of students.
- It was developed based on the coding knowledge of innovators using appinventor.
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7.0 ACHIEVEMENT/RECOGNITION

- 1. Gold Award MYSE 2021
- Gold Award 4th Advanced Innovation & Engineering Exhibition (AiNEX) 2021
- Silver Award International Innovation And Invention Competition (InIIC series 1/2021)
- **4. Silver Award** Penang International Innovation, Invention and Design Competition (PIIID) 2021
- 5. Book Chapter LaRIS

8.0 INVENTORS

1. Goh Kok Ming (Ketua)

Beh Peck Nuy

2. Saw Kee Yin



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Kajian Pembangunan Modul Peningkatan Pengajaran dan Pembelajaran Jawi Temiar (M3PJaTE) bagi Pelajar Tahun 1

Aina Fatini Mohd Safian Siti Nur Izyandiyana Abdul Hadi

Universiti Sultan Azlan Shah, Perak

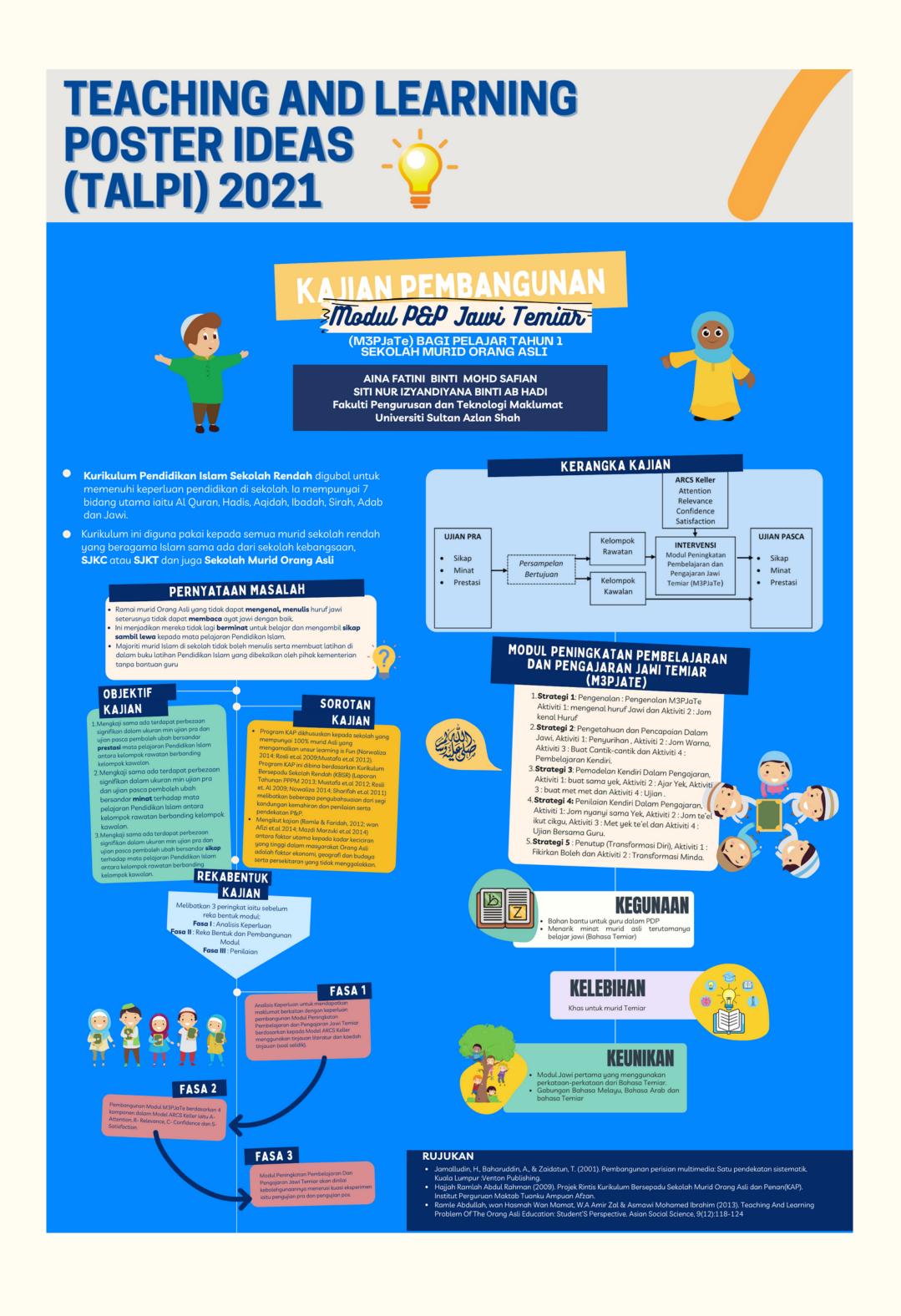
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Abstrak

Kurikulum Pendidikan Islam Sekolah Rendah digubal untuk memenuhi keperluan pendidikan di sekolah. Ia mempunyai 7 bidang utama iaitu Al Quran, Hadis, Aqidah, Ibadah, Sirah, Adab dan Jawi. Kurikulum ini diguna pakai kepada semua murid sekolah rendah yang beragama Islam sama ada dari sekolah kebangsaan, SJKC atau SJKT dan juga sekolah Murid Orang Asli dan perlu di sampaikan menggunakan teknik, kaedah serta pendekatan yang bersesuaian dengan murid. Walau bagaimanapun, murid Orang Asli tidak dapat mengikuti proses pengajaran dan pembelajaran (P&P) Pendidikan Islam seperti mana yang terdapat di dalam silibus Pendidikan Islam disebabkan tidak mampu memahami tulisan jawi, kurang minat dan mereka juga masih baru dengan pengetahuan sedia ada tentang agama Islam. Selain daripada itu, bagi murid Tahun 1, mereka kurang pendedahan dengan Bahasa Melayu disebabkan mereka hanya berada di dalam kelompok kaum mereka sahaja. Di samping itu, mereka belum didedahkan dengan tulisan jawi dengan sebaiknya dan secara tidak langsung ini dapat mengurangkan minat dan semangat mereka untuk belajar mata pelajaran Pendidikan Islam. Oleh itu, kajian ini bertujuan membangunkan sebuah modul Peningkatan Pengajaran dan Pembelajaran Jawi Temiar bagi meningkatkan tahap efikasi pembelajaran Jawi bagi Murid di Sekolah Murid Orang Asli. Penggunaan reka bentuk dan pembangunan menggunakan 3 fasa dalam pembangunan modul iaitu Fasa Analisis Keperluan, Fasa Reka Bentuk dan Pembangunan dan Fasa Penilaian. Fasa Analisis keperluan menggunakan kajian literatur serta soal selidik, fasa reka bentuk dan pembangunan adalah proses menyiapkan modul yang mana penggunaan Model ARCS Keller di guna pakai. Seterusnya fasa terakhir adalah fasa penilaian modul dengan menilai keberkesanan modul dengan cara menjalankan penilaian ujian Pra dan ujian Pos. Dengan penggunaan ketiga-tiga fasa ini, maka Modul Peningkatan Pembelajaran dan Pengajaran Jawi Temiar (M3PJaTe) dapat dihasilkan serta dapat di guna pakai ke atas murid-murid Tahun 1 di Sekolah Murid Orang Asli (SMOA) Temiar.

Kata Kunci: modul Latihan, efikasi, draf modul, Model ARCS Keller, Temiar

Kajian Pembangunan Modul Peningkatan Pengajaran dan Pembelajaran Jawi Temiar (M3PJaTE) bagi Pelajar Tahun 1



Projek I-Mualim: Kemahiran Kejurulatihan dalam Perkongsian Pintar bersama Guru KAFA

Mohd Fadhil Aziz Mardzelah Makhsin Nor Hasimah Ismail Muhammad Ikram Che Mee

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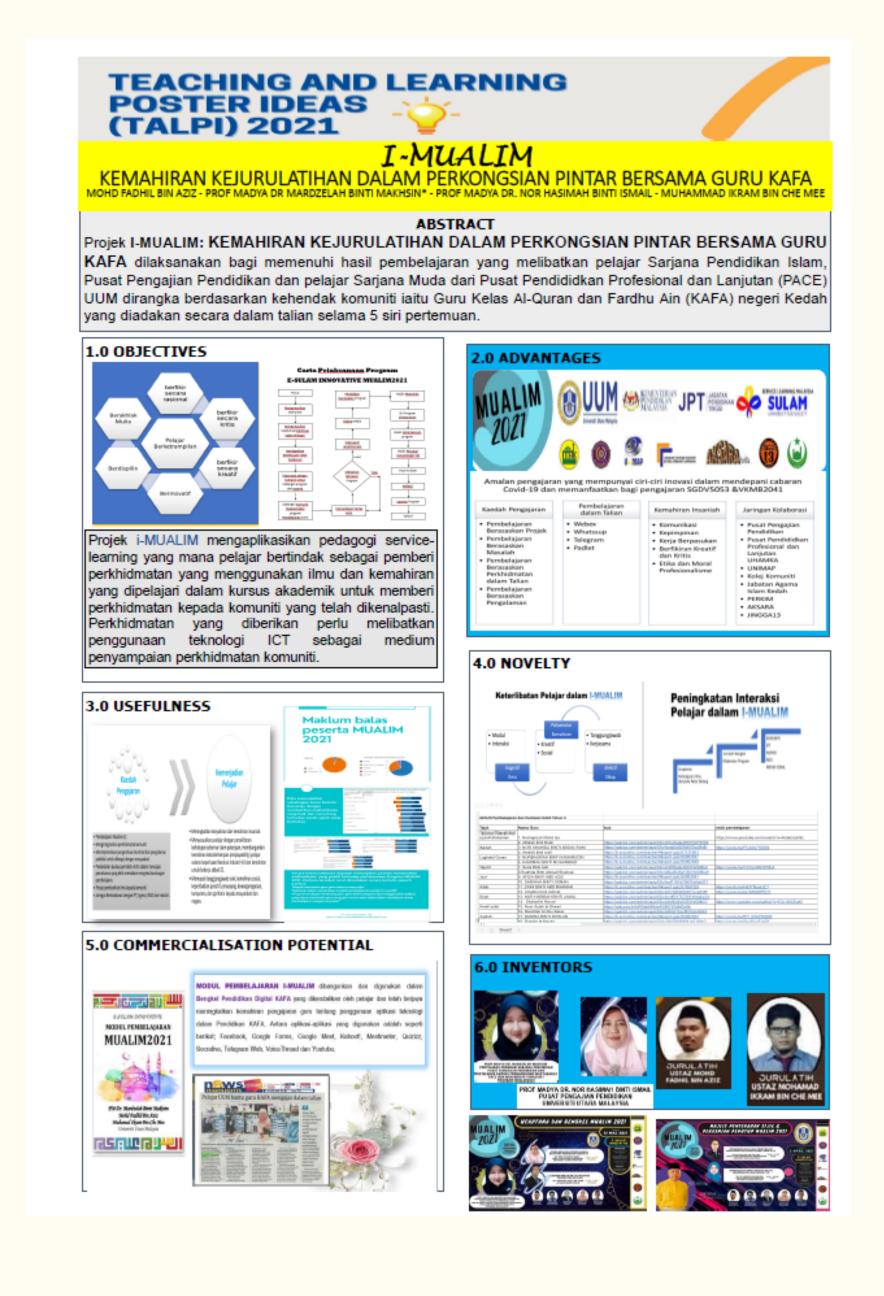
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Abstrak

Projek I-MUALIM: KEMAHIRAN KEJURULATIHAN DALAM PERKONGSIAN PINTAR BERSAMA GURU KAFA dilaksanakan bagi memenuhi hasil pembelajaran yang melibatkan pelajar Sarjana Pendidikan Islam, Pusat Pengajian Pendidikan UUM. Ia dirangka berdasarkan kehendak komuniti iaitu Guru Kelas Al-Quran dan Fardhu Ain (KAFA) negeri Kedah yang diadakan secara dalam talian selama 5 siri pertemuan. Kaedah pembelajaran ini menjurus ke arah pembelajaran abad ke-21, mengintegrasikan perkhidmatan komuniti, menterjemahkan pengetahuan teoritikal, dan pengalaman praktikal untuk dikongsi dengan masyarakat, pendedahan budaya pemikiran kritis dalam mencapai pemahaman yang lebih mendalam mengenai kandungan pembelajaran, proses pembenihan ilmu kepada komuniti dan jaringan berkolaborasi dengan IPT, Agensi, NGO dan Industri. Projek ini telah mendapat kelulusan Dekan Pusat Pengajian Pendidikan serta kerjasama dengan UHAMKA, Universiti Malaysia Perlis, Kolej Komuniti Langkawi, Jabatan Agama Islam Negeri Kedah, PERKIM Langkawi, AKSARA Perlis dan JINGGA13. Antara pengisian di dalam program ini ialah sesi perkongsian ilmu melalui 10 slot ucaptama yang disampaikan oleh para pakar bidang terdiri daripada pensyarah UUM, UNIMAP, UHAMKA Indonesia, AKSARA Perlis dan JINGGA13. Projek I-MUALIM turut mendapat publisiti dan liputan media di UUM, UNIMAP, Radio KedahFM dan akhbar Utusan Malaysia pada Jumaat, 12 Mac 2021. Projek ini amat penting bagi meningkatkan keyakinan dan kemahiran insaniah pelajar, menyesuaikan mereka dengan persekitaran kehidupan sebenar alam pekerjaan, membangunkan kemahiran kebolehkerjaan (employability) pelajar selaras keperluan Revolusi Industri 4.0 dan kemahiran untuk bekerja di abad 21. Di samping memupuk tanggungjawab sivik, kemahiran sosial, keperibadian positif, sifat penyayang, kewarganegaraan kompeten, dan sifat prihatin kepada masyarakat dan negara.

Kata Kunci: modul Latihan, efikasi, draf modul, Model ARCS Keller, Temiar

Projek I-Mualim: Kemahiran Kejurulatihan dalam Perkongsian Pintar bersama Guru KAFA



PIC-TO-READ: Penggunaan Gambar Murid sebagai Ikon dalam Klinik Membaca

Munirah Mhd Rejab Muhammad Noor Abdul Aziz

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Abstrak

Sejak Perintah Kawalan Pergerakan (PKP) dilaksanakan, semua sesi pembelajaran di sekolah dilaksanakan secara dalam talian. Walaupun pelbagai kaedah menarik digunakan untuk mengekalkan momentum, minat, dan fokus murid di dalam bilik darjah maya, namun kawalan kelas menjadi satu cabaran besar untuk para guru. Penggunaan mikrofon di dalam sesi Google Meet tidak dapat dikawal dengan baik kerana ada waktunya murid tidak mendengar arahan guru dengan jelas dan ini mengakibatkan keadaan kelas maya menjadi bingit. Inovasi Picto-Read dapat sedikit sebanyak membantu murid untuk fokus di dalam membaca dan hanya memasang mikrofon apabila gambar mereka ditayangkan. Selain itu, hasil temu bual dengan guru dan murid, pemantauan guru, serta refleksi guru mendapati motivasi murid meningkat apabila gambar mereka ditayangkan kerana terdapat elemen penghargaan di dalam penggunaan kaedah ini. Inovasi ini boleh menjadi pendorong kepada peningkatan kemahiran membaca terutamanya di dalam kalangan murid kelas pemulihan.

Kata Kunci: gambar, ikon, inovasi , Pic -to- Read

PIC-TO-READ: Penggunaan Gambar Murid sebagai Ikon dalam Klinik Membaca



Modul Hibrid 18 Nilai Pendidikan Moral Sekolah

Nicole Wrynn Walton Aaron Bil Nigel Cornie Tompiris Hairul Faiezi Lokman

IPG Kampus Ilmu Khas, Kuala Lumpur

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Abstrak

Kandungan nilai-nilai Kurikulum Standard Sekolah Malaysia (KSSM) dan Kurikulum Standard Sekolah Rendah (KSSR) yang baru telah diperkenalkan pada tahun 2017 dengan penambahbaikan kandungan yang disemak semula pada tahun 2019. Berlaku perubahan besar terhadap kandungan nilai-nilai yang perlu dikuasai oleh murid. Malangnya, pandemik COVID-19 telah melanda dunia. Maka kebanyakan guru berusaha untuk memberikan silibus kandungan nilai dan cuba membantu murid secara dalam talian. Namun belum ada sebarang modul atau pendekatan di lapangan yang memperkenalkan modul khusus berkenaan aspek hafalan nilai moral ini. Oleh itu, inovasi ini dibangunkan bagi membantu para murid, pelajar, guru dan para pendidik untuk menguasai 18 nilai Pendidikan Moral Sekolah yang mula digunakan di dalam KSSR dan KSSM ini. Kaedah yang digunakan boleh dijadikan sebagai rujukan dan panduan berdasarkan aras kecenderungan visualisasi, audio dan perkataan (VAP) dalam membantu ingatan. VAP diterjemahkan melalui Lagu, Mnemonik, dan Gambar bermakna (LMG). Modul ini adalah secara hibrid, iaitu naskah pantas ingat dan hafal dengan gabungan elemen nilai diintegrasikan bersama medium teknologi maklumat, dan ianya sangat sesuai digunakan di dalam situasi sekarang. Modul ini telah mendapat kesahan empat orang pakar sebelum ianya diperkenalkan. Bagi menguji keberkesanan modul ini, ia telah disebarluaskan ke seluruh sekolah di Malaysia secara dalam talian. Penerangan berkenaan modul telah disampaikan kepada beberapa sekolah di negeri rintis iaitu Pahang, Selangor, Putrajaya, Kuala Lumpur, Pulau Pinang dan Sabah. Borang maklum balas dan keberkesanan modul juga telah diberikan serta dianalisis. Dapatan kajian tinjauan berkenaan model ini menunjukkan bahawa majoriti sampel menyatakan modul ini sangat menarik serta dapat membantu mereka untuk mengetahui nilai-nilai moral. Sampel juga menyatakan bahawa modul ini telah dapat membantu ingatan mereka berkenaan senarai nilai dalam Pendidikan Moral.

Kata Kunci: modul , 18 nilai, Pendidikan Moral, hibrid

Modul Hibrid 18 Nilai Pendidikan Moral Sekolah







Elektif Pendidikan Moral IPG Kampus Ilmu Khas

MODUL HIBRID 18 NILAI PENDIDIKAN MORAL SEKOLAH

AHLI KUMPULAN:
NICOLE WRYNN
AARON BIL NIGEL
CORNIE TOMPIRIS
HAIRUL FAIEZI B. LOKMAN

RASIONAL

Pengenalan nilai Kurikulum Standard Sekolah Malaysia (KSSM) dan Kurikulum Standard Sekolah Rendah (KSSR) baharu diperkenalkan pada tahun 2017 dengan tambah baik kandungan yang disemak semula pada tahun 2019. Berlaku perubahan besar terhadap kandungan nilai yang perlu dikuasai oleh murid. Malangnya tahun 2019, tiada sampai setengah tahun ianya diperkenalkan (selepas tambah baik kandungan) berlakulah pandemik yang melanda dunia. Maka kebanyakan guru berusaha untuk memberikan silibus kandungan nilai dan cuba membantu murid di sekolah. Namun belum ada sebarang modul atau pendekatan dilapangan yang memperkenalkan modul khusus berkenaan aspek hafalan nilai moral ini. Oleh kerana itu, Inovasi Modul ini dibina bagi membantu para murid dan guru seluruh Malaysia

OBJEKTIF INOVASI

- 1. Mendedahkan kumpulan sasar (guru, murid, pelajar dan pendidik) mengetahui senarai 18 nilai baharu dalam subjek Pendidikan Moral Sekolah.
- Membantu kumpulan sasar (guru, murid, pelajar dan pendidik) untuk mengingati senarai 18 nilai baharu dalam subjek Pendidikan Moral Sekolah.

INOVASI DISAHKAN PAKAR

Inovasi Modul ini telah disahkan oleh empat orang pakar penilai bidang:

DR. MUHAMMAD KHAIRULRIJAL B.
MOHAMAD SAAD
Pakar Pembangunan Instrumen ATSS Proses

Pakar Pembangunan Instrumen ATSS Proses Pertimbangan Moral Dilema Media Sosial

PN. FATIN SHAHAMAH BT. SAMSUDDIN Jurulatih Utama Kebangsaan Pendidikan Moral KSSM Pemeriksa Peperiksaan SPM Pendidikan Moral PN. NOOR RULADHA BT. MOHAMED
Panel Penggubal Buku Perpaduan Untuk Pendidikan
Moral, Pendidikansivik & Kewarganegaraan,

PUAN NURUL 'AIN BT. ABDUL HALIM
Jurulatih Utama Kebangsaan Pendidikan Moral
KSSM
Jawatankuasa Penyemakan NSK Pendidikan Moral

- APA YANG DI INOVASIKAN?
- ✓ Kaedah pembelajaran nilai secara fizikal (bertemu) ditukar fungsi secara digital sepenuhnya. Mudah diakses.
 ✓ Bagi membantu kumpulan sasar (guru, murid, pelajar dan pendidik) berkenaan penyebaran dan hafalan nilai Moral Pendidikan Moral ini, pendekatan hibrid iaitu jaitu gabungan elemen nilai diintegrasikan bersama medium teknologi maklumat, dan ianya sangat sesuai dalam situasi semasa dunia massa (era pandemik).
- ✓ Kaedah yang digunakan pula menggunakan Teori Kognitif Pembelajaran Multimedia (Cognitive Theory Multimedia Learning) dan Teori Perkembangan Moral yang mengimplementasikan akses pantas rujukan dan panduan berdasarkan aras kecenderungan visualisasi, audio dan perkataan (VAP) dalam membantu ingatan.
- ✓ VAP pula diterjemahkan melalui Lagu, Mnemonik dan Gambar bermakna (LMG).

IDEA INOVASI Idea bagi is sepenuhny https://lynk

Idea bagi projek ini boleh diakses sepenuhnya melalui link ini https://lynk.id/moral_ipgkik

Rajah 1 : Paparan Muka Utama Modul



Rajah 2 : Modul 1 Lagu 18 Nilai Moral





Rajah 3 : Modul 2 Mnemonik 18 Nilai Moral



Rajah 4 : Modul 3 18 Gambar Bermakna Nilai Moral





IMPAK/MANFAAT INOVASI



Telah
disebarluaskan
secara webinar
kepada murid
dan guru di
enam buah
negeri

WP Putrajaya

Wilayah Sabah
Wilayah Persekutuan Kuala Lumpur
Pulau Pinang
Pahang
Selangor

Dapatan Borang Maklum Balas Modul .N: 880

■ SANGAT SETUJU ■ SETUJU
■ SEDERHANA ■ 4th Qtr



Dapatan Respon Terbuka .N: 880

Pada pendapat saya, modul ini dapat dijadikan sebagai batu loncatan kepada guru utk menjadi pembimbing pdpc mahupun pdpr.(Pengguna 5)

Saya suka modul bergambar dan ianya sangat membantu mengingat dan memahami 18 nilai dengan lebih mendalam. Terima kasih.(Pengguna 64)

Memberi kefahaman tentang nilai universal pendidikan moral dan membantu para murid , guru dan para pendidik untuk menguasai 18 nilai Universal Pendidikan Moral dalam Kurikulum Standard Sekolah (Pengguna 83)

Modul yang dihasilkan amat baik. Pada pendapat saya, modul seperti ini harus dihasilkan dengan lebih banyak kerana ia dapat membantu bukan sahaja pelajar malahan seluruh masyarakat kerana ia merupakan modul bergambar dan dapat menarik minat ramai pembaca. (Pengguna 87)

PENGKOMERSIALAN

- 1. MyIPO
- ISBN Perpustakaan Negara Malaysia
 Penghasilan Penulisan Artikel Jurnal
- Penghasilan Penulisan Artikel Jurnal
 Disebarkan kepada seluruh Malaysia

SRT- Jom Kuiz

Muhammad Adam Fawwaz Khairul Izwan Rafidah Abd Karim

Sekolah Menengah Padang Tembak, Wilayah Persetukuan Kuala Lumpur

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Abstrak

Di era teknologi dan ke arah mereliasasikan Revolusi Industri 4.0, para pelajar perlu terdedah dan mahir di dalam penggunaan teknologi. Oleh itu, produk kami merupakan sebuah aplikasi mudah alih yang dapat membantu para pelajar sekolah menengah yang mengambil jurusan bidang Sains Rumah Tangga (SRT) untuk memahirkan lagi pemahaman mereka menerusi kuiz yang telah disediakan di dalam aplikasi ini. Aplikasi berbentuk permainan ini, "SRT - Jom Kuiz ", adalah aplikasi pertama untuk mata pelajaran Sains Rumah Tangga Tingkatan 4. Produk ini diharapkan dapat menyumbang kepada pencapaian yang lebih baik di dalam mata pelajaran Sains Rumah Tangga di kalangan para pelajar yang mengambil jurusan bidang ini . Di samping itu, penggunaan teknologi ini juga dapat meningkatkan kemahiran penggunaan teknologi telefon mudah alih di kalangan para pelajar.

Kata Kunci: Sains Rumah Tangga, aplikasi mudah alih, Tingkatan 4, permainan

SRT- Jom Kuiz

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



SRT JOM KUIZ



OBJEKTIF

- ~ Meningkatkan lagi minat mempelajari mata pelajaran sains rumah tangga
- ~ meningkatkan lagi penguasaan sub topik mata pelajaran SRT dengan latih tubi berbentuk allikasi permainan digital

FAEDAH UNTUK MASYARAKAT

- ~ Ibu bapa dapat sama sama membantu pelajar menjawab kuiz digital lebih mudah .
- ~ Meningkatkan minat di kalangan pelajar untuk mengambil aliran SRT di sekolah
- ~ Masyarakat yang berminat mengetahui tentang subjek SRT dapat akses aplikasi ini dengan lebih mudah

POTENSI UNTUK DIKOMERSILKAN

PERNYATAAN MASALAH

~ Permainan digital kuiz SRT dapat dikomersilkan sebagai aplikasi berbayar di App store

Pelajar kurang minat belajar dan malas mengulang kaji

mata pelajaran SRT dengan menggunakan buku sahaja

- ~ Bekerjasama dengan pihak Kementerian Pelajaran Malaysia dan juga konsultan pendidikan untuk dikomersilkan
- ~ Berpotensi dikomersilkan dalam bentuk E book

NOVELTI

- ~ Permainan digital kuiz SRT yang mengandungi 6 sub topik
- ~ Kuiz tersedia dengan petunjuk (hint) jawapan
- ~ Aplikasi dengan grafik dan bunyi menarik
- ~ Fleksibel dan boleh bermain kuiz di di mana mana sahaja

ANUGERAH YANG DITERIMA

PINGAT PERAK (SILVER MEDAL)

DARUL AMAN INTERNATIONAL INNOVATION, COMPETITION AND EXIBITION (DIICE'2)

NAMA AHLI PROJEK





MUHAMMAD ADAM FAWWAZ

Sekolah Menengah Padang Tembak, Kuala Lumpur, Malaysia



DR. RAFIDAH ABD KARIM

UiTM Tapah Campus, Perak, Malaysia

Enhanced Digital Learning Materials to Assist in Learning Calculus

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Abstract

In this modern society where online learning has become the main platform for students, the need to have and produce online learning materials has also increased. The use of visual aids as teaching materials stimulates thinking and increases students' understanding when they experience a pleasant and successful learning environment. Therefore, this motivates us to produce an enhanced learning material to assist students in learning Calculus. The objective of this video is to help students understand the topic regarding Related Rates better. The advantages of this video are it is exciting and easy to be understood. The features of this video are the introduction of differentiation and related rates, followed by a problem and its solution. The usefulness of this video is it can help others to better understand the topic since the animation of the video is very engaging. The way the video is presented or introduced makes the video interesting. The solution is shown step by step and is easy for students to follow. There are many ways an educator can make their teaching exciting, and most importantly, students can understand and engage with the topic. This video is chosen since many students can benefit from it, as it shows from their likes and comments on it, saying that it has helped them a lot. There will be a commercialization potential of this video if it combines with all the topics in Calculus. More standardized animation and design and the way the author explains a topic can attract customers, especially students, to buy the video compilation in the future.

Keywords: learning, teaching video, calculus, mathematics, differentiation

Enhanced Digital Learning Materials to Assist in Learning Calculus

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



ABSTRACT

Calculus Project Presentation Competition (CAPOPCOM) is a program initiated by lecturers who taught Calculus courses. Initially, this is just a standard group project assignment, where students will be answering a few questions related to a particular topic and present their answers. The main objective of this program is to enhance students' understanding of that topic and make the learning more fun. The lecturer initiated a competition where students require to solve a real-world problem related to the topics they have learned. In addition, this competition will enhance students' soft skills in creativity while making the videos. This competition indirectly can boost students' confidence to talk in public as they need to explain their ideas in a video. This competition-based learning can build their teamwork since this project needs to be done in a group. This program is helpful as students were more enthusiastic and enjoy making and completing the video. There are many ways in how educators can enhance their students' understanding. Organizing this type of competition can be applied to other campuses that offer the same subject. All videos that participated in this competition can then be compiled and commercialized as teaching material for a specific topic since the videos are creative and exciting.

1.0 OBJECTIVES

A competition-based learning created to The students were more enthusiastic enhance students' understanding of as they can engage directly in the topic in Calculus. motivates students to compete in the making and completing the video overcoming challenge to improve their because they can contribute their performances in the activities and this creativity. will make the learning more fun.

2.0 ADVANTAGES

Competitions learning activities. Students enjoy

3.0 USEFULNESS

This competition will sharpen students' soft skills in creativity while making the videos. This program can boost students' confidence to talk in public as they need to present their ideas in a video. This program can build their teamwork since this project needs to be done in a group.

4.0 NOVELTY

This program combines competition-based learning and problem-based learning in a network environment.

5.0 COMMERCIALISATION POTENTIAL

Approach can be reused in other discipline that Mathematics. related are not competition-based learning to other campuses 2) Janvin Janteng that offer the same subject.

6.0 INVENTORS

- Organizing 1) Tammie Christy Saibin

Strengthening The Character Education Trough Traditional Games

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Abstract

In teaching and learning, an educator needs to innovate methods so that learning is fun and not boring for children. Given that a child's world is play, a method that combines learning and play is popularly called 'fun learning'. The learning process with a pleasant atmosphere should be supported by simple and interesting game tools and a creative teacher. Hopefully the interaction that occurs in it becomes varied and not boring. One of the learning innovations that can be developed and implemented is by utilizing traditional games. Even though it seems contrasted with the current Digital Era where information technology is more widely used in educational institutions, we should not be hesitated to take back local wisdom. This is not done without reasons. as we need to raise curiosity and help in the character education of the learners. Traditional games are a solution for those in 3T (Leading, Remote, Lagging) and island areas. The limited facilities and infrastructure that support online learning allow traditional games to act as a way out for these learners in the current pandemic period.

Keywords: digital era, character, education, traditional games

Strengthening The Character Education Trough Traditional Games



Ujian Superitem Pengukuran 2.0

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Abstrak

Kursus matematik (SSM 1022) merupakan salah satu kursus yang terdapat dalam sesetengah program pengajian yang ditawarkan di Kolej Komuniti. Antara topik yang terkandung di dalam kursus matematik adalah kuantiti dan unit asas, pengukuran, persamaan algebra, dan persamaan linear. Pengukuran merupakan topik yang amat penting bagi silibus matematik di Kolej komuniti. Di akhir pengajaran, pelajar diharapkan akan dapat memahami konsep geometri 2 matra dan 3 matra, mengira luas dan isipadu bagi bentuk-bentuk geometri dan seterusnya dapat menyelesaikan masalah yang melibatkan luas dan isipadu dalam kehidupan. Namun, pencapaian pelajar di dalam topik pengukuran adalah lemah berbanding topik matematik yang lain. Justeru itu, Ujian Superitem Pengukuran 2.0 diperkenalkan bagi memudahkan pengajaran dan pembelajaran topik pengukuran di Kolej Komuniti serta memperkembangkan pemikiran pelajar agar selari dengan abad ke-21. lanya merupakan satu pentaksiran alternatif yang inovatif dan kreatif untuk mengukur perkembangan kognitif pelajar dalam kebolehan penyelesaian masalah berkaitan pengukuran. Ujian Superitem Pengukuran 2.0 merupakan ujian yang dibina berdasarkan proses penaakulan yang disesuaikan dengan model SOLO (Structure of the Observed Learning Outcome) dan model Skematik Fong. Ujian Superitem Pengukuran 2.0 ini adalah terdiri daripada situasi masalah dan lima tahap kesukaran yang berbeza serta mengandungi tiga jenis pengganggu bagi setiap tahap yang dibina. Konsep peringkat struktur respons berhierarki dan pengganggu telah diaplikasikan di dalam pembinaan soalan. Ujian ini terbukti dapat menentukan pemahaman konsep pengukuran pelajar dari peringkat asas ke peringkat yang lebih kompleks. Didapati 61.6% daripada 87 orang pelajar kolej komuniti yang terlibat dapat menggunakan dan mengintegrasikan maklumat yang diberi bagi mengira luas tapak namun mereka tidak dapat menilai hubungan dan membuat kesimpulan mengenai perkaitan di antara setiap permukaan bentuk-bentuk geometri. Manakala 38.6% daripada mereka dapat menilai hubungan dan membuat kesimpulan mengenai perkaitan di antara setiap permukaan bentuk-bentuk geometri dan 24.8% dapat menggunakan penaakulan dan kreativiti untuk menguji konjektur yang dibina bagi situasi yang lebih kompleks. Format ini juga amat memudahkan pensyarah untuk mengenal pasti kelemahan pelajar dan memimpin mereka mencapai pemikiran yang kritis dan kreatif. Format ujian ini juga sesuai untuk dilakukan di dalam versi kertas dan pensel atau pun secara dalam talian. Ianya juga merupakan templat yang amat berguna untuk membina ujian bagi topik matematik yang lain.

Kata Kunci: Ujian Superitem Pengukuran 2.0, model SOLO dan model Skematik Fong.

Ujian Superitem Pengukuran 2.0

UJIAN SUPERITEM PENGLIKURAN



TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



PENGENALAN

Kursus matematik merupakan salah satu kursus yang ditawarkan oleh sesetengah program pengajian di kolej komuniti. Antara topik yang terkandung dalam kursus matematik adalah topik pengukuran. Namun, pencapaian pelajar kolej komuniti adalah kurang memberangsangkan dalam kursus matematik. Pendekatan baharu diperkenalkan dengan menggunakan Ujian Superitem Pengukuran 2.0 yang dibina melalui proses kemahiran penaakulan berdasarkan model Structure of the Observed Learning Outcome (SOLO) dan model Skematik Fong.

PENYATAAN MASALAH

- Gred Purata Mata Pelajaran [GPMP] SPM bagi mata pelajaran matematik telah mencatatkan penurunan [Lembaga Peperiksaan, 2019]
- Malaysia telah memperoleh 465 mata iaitu berada pada tahap sederhana [Mullis et al., 2016]
- Pencapaian pelajar kolej komuniti dalam matematik tidak memberangsangkan [Damanhuri et. al, 2020]
- Kemahiran penaakulan yang rendah dalam topik pengukuran panjang, luas dan isipadu [Tan Sisman & Aksu, 2016]

OBJEKTIF

- Membina instrumen Ujian Superitem
- Mengenal pasti peringkat kemahiran penaakulan bagi topik pengukuran dalam kalangan pelajar kolej komuniti.
- Mengenal pasti jenis-jenis kesilapan bagi topik pengukuran dalam kalangan pelajar kolej komuniti.

SIGNIFIKAN

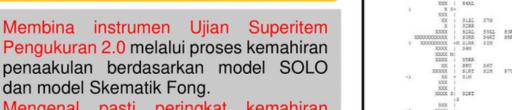
- Ujian Superitem Pengukuran 2.0 dibina secara berhierarki
- Setiap pilihan pengganggu adalah merujuk kepada jenis-jenis kesilapan yang dilakukan oleh pelajar
- Pentadbiran instrumen secara atas talian menggunakan aplikasi google form
- Kenal pasti kekuatan dan kelemahan pelajar dalam topik pengukuran
- Proses penilaian, diagnosis dan pemulihan dapat dilakukan dalam kadar segera

mohdfaizul_ridzuan@yahoo.com.my PROF. MADYA DR. LIM HOOI LIAN MOHD FAIZUL BIN RIDZUAN

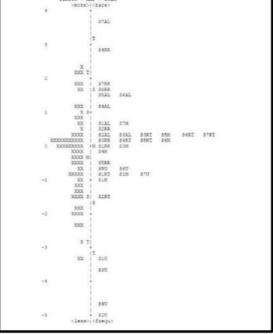


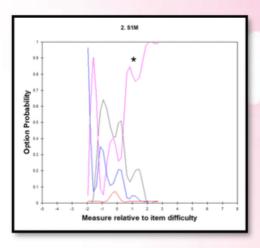


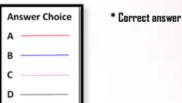




IMPLIKASI







Class Map : A Pictorial Mind Map Based on Mnemonic of Loci Method in Mastering Synthesis of Organic Chemistry

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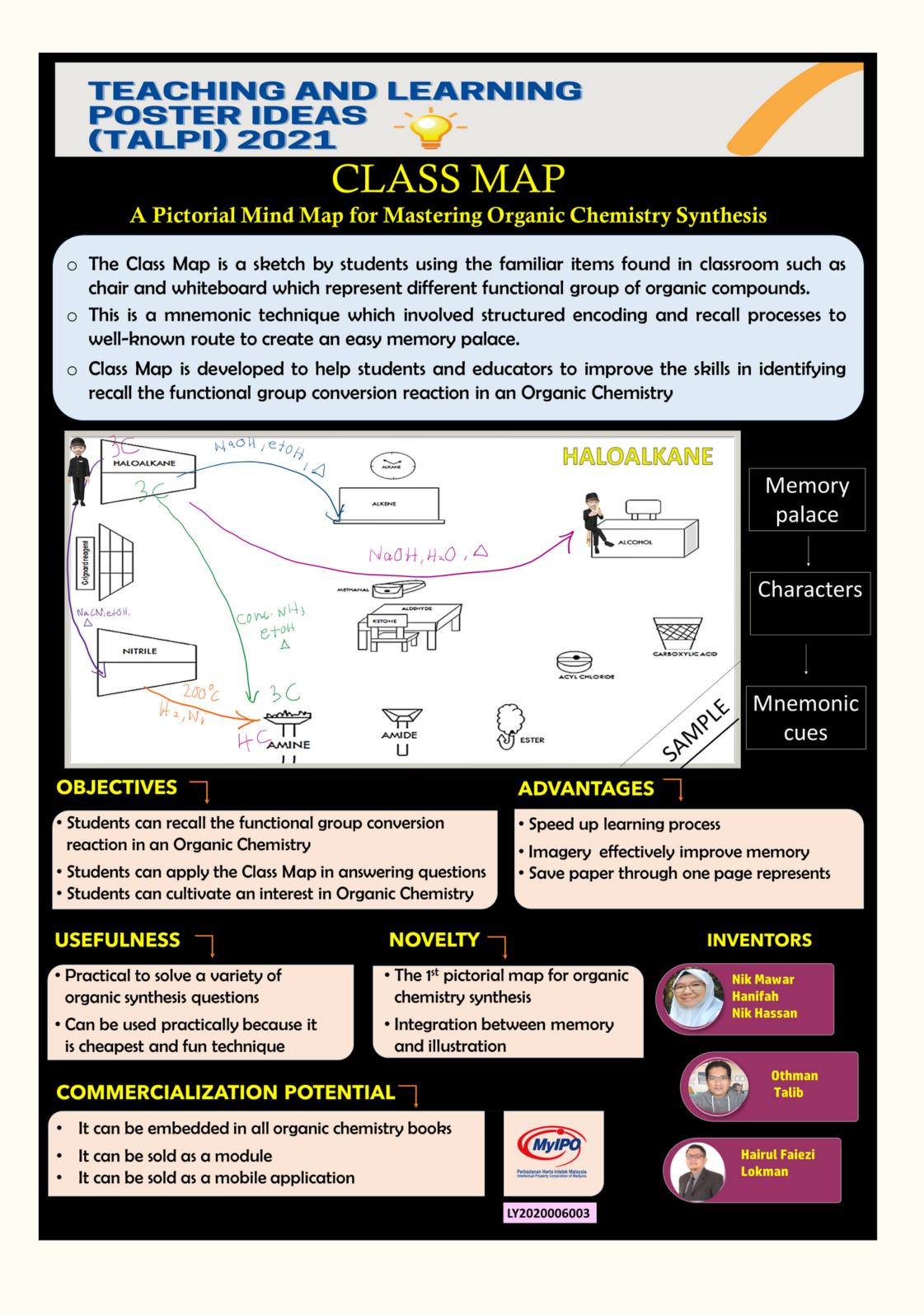
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Abstract

Organic Chemistry is listed as one of nine difficult areas in Chemistry. Much research has demonstrated that mostly students struggle in Organic Chemistry courses regarding to the large number of reactions and reagent that must be mastered. The innovation development of pictorial mind map namely as Class Map is developed to help preuniversity science stream students, undergraduate students, and educators to improve the skills in synthesis organic which to convert one functional group to another. This mind map is based on the Mnemonic of Loci (MoL) technique or basically known as memory palace. The MoL technique can improve students' skills in recalling facts as the images and other associations enrich the context of the reaction to be learned plus it would speed up the learning process in a fun way. Class Map is the researchers' proposed solution in overcome the obstacles of learning synthesis organic. The Class Map is sketched by including the familiar items found in classroom such as chair, table and whiteboard whereas each item will represent different functional group of organic compounds. In creating the personalized memory palace, students can use the Class Map, mnemonics cues and the characters suggested by the researchers. However, students can create their own mnemonics cues by linking each item to one another. The Class Map has been used in pre-university classrooms and the researchers had improvised it by conducting action research on students of Form Six Centre in Pahang. The findings of the Class Map intervention found that students can remember the functional group conversion reaction, students manage to apply the Class Map in answering exam format questions and finally students can cultivate interest towards Organic Chemistry subject. Students stated that they are interested in using Class Map in fact improving their abilities to recall and perform well on synthesis problems.

Keywords: class map, pictorial mind map, Mnemonic, Chemistry

Class Map: A Pictorial Mind Map Based on Mnemonic of Loci Method in Mastering Synthesis of Organic Chemistry



The Padlet Project: Fostering Self-Regulated Learning

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Abstract

Corona Virus Disease or COVID-19 has caused chaotic across the globe. In containing the outbreak, Malaysian government implemented the movement control order (MCO), which significantly impacted many sectors including education. Since all educational institutions are closed, more than 8 million students are forced to implement home-based learning. In making sure the learning occurs, students should be self-driven, able to regulate their learning based on personal capability and their own pace. Those skills are needed especially when learning in this new norm. For that reason, this case study demonstrates the use of Padlet to promote self-regulated learning and encourage students to become more autonomous. Padlet was introduced with the assumption that if a technology-based instructional design was implemented, students would self-regulate more in their studies. The results show Padlet does foster self-regulated learning where it motivates and encourages students to actively participate during teaching and learning sessions. It also provides information to teachers, enabling them to strategize teaching and learning more effectively.

Keywords: Padlet, map, self-regulated learning, autonomous

The Padlet Project: Fostering Self-Regulated Learning



Meningkatkan Kekemasan Tulisan dalam Kalangan Murid Prasekolah Melalui Pendekatan "GUL"

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Abstrak

Kajian kualitatif berteraskan kajian tindakan bertujuan meningkatkan kekemasan tulisan seorang murid lelaki prasekolah yang berumur enam tahun di sebuah prasekolah IPG daerah Kubang Pasu melalui pendekatan 'GUL'. Pendekatan ini merupakan latihan untuk meningkatkan kemahiran motor halus yang mana dapat memperbaiki kekemasan tulisan dan menulis dengan kemas dan cantik. Tinjauan awal dijalankan melalui pemerhatian dan analisis dokumen untuk mengetahui tahap kekemasan tulisan. Hasil pemerhatian didapati murid tersebut tidak dapat menulis dengan kemas dan cantik. Data dikumpul melalui analisis dokumen sebelum dan selepas intervensi dijalankan, nota lapangan, temu bual dan pemerhatian semasa proses intervensi dijalankan. Data dianalisis secara kualitatif untuk menjawab persoalan kajian. Data dianalisis menggunakan analisis kandungan. Data dianalisis secara kualitatif melalui analisis dokumen, catatan anekdot, temu bual dan pemerhatian. Triangulasi sumber digunakan untuk menyemak data. Dapatan menunjukkan penggunaan pendekatan 'GUL' berjaya membantu Hadha menulis dengan lebih kemas dan cantik.

Kata Kunci: Tulisan, kekemasan, Pendekatan 'GUL'

Meningkatkan Kekemasan Tulisan dalam Kalangan Murid Prasekolah Melalui Pendekatan "GUL"

TEACHING AND LEARNING POSTER IDEAS PENDEKATAN 'GUL'-(TALPI) 2021 TALPI16A



ABSTRACT

Kajian tindakan ini berbentuk kualitatif yang menggunakan Model Kemmis dan Mc Taggart (1988). Kajian ini dijalankan bertujuan meningkatkan kekemasan tulisan seorang murid lelaki prasekolah yang berumur enam tahun di sebuah prasekolah IPG daerah Kubang Pasu melalui pendekatan 'GUL'. Pendekatan ini merupakan latihan untuk meningkatkan kemahiran motor halus yang mana dapat memperbaiki kekemasan tulisan dan menulis dengan kemas dan cantik. Tinjauan awal dijalankan melalui pemerhatian dan analisis dokumen untuk mengetahui tahap kekemasan tulisan. Data dikumpul melalui analisis dokumen sebelum dan selepas intervensi dijalankan, nota lapangan, temu bual dan pemerhatian semasa proses intervensi dijalankan. Data dianalisis secara kualitatif melalui analisis dokumen, catatan anekdot, temu bual dan pemerhatian. Triangulasi sumber digunakan untuk menyemak data. Dapatan menunjukkan penggunaan pendekatan 'GUL' berjaya membantu subjek kajian menulis dengan lebih kemas dan cantik.

1.0 OBJECTIVES

- 1. Memperbaiki kekemasan tulisan murid prasekolah menggunakan pendekatan 'GUL' .
- 2. Menambahbaik amalan saya dalam sesi PdP melalui pendekatan 'GUL' dalam membantu murid prasekolah mengatasi masalah menulis dengan tidak kemas dan cantik.

3.USEFULNESS



5.0 COMMERCIALIZATION POTENCIAL Seminar IMPROVING THE PRESCHOOLERS' HANDWRITING SKILLS VIA "GUL" APPROACH Robiah Binti Hj. Shuib 1), Furiza Binti Yahya 1), Muhammad Taufiq Cheng Bin Abdullah 1), Suhaini Binti Che Man 2), Norliza Binti Khushairi 3a) Asia Darulaman Campus Teacher Education Institute, Jitra 06000 Kedah, Malaysia SAK Turbu Putra, Lampkowi, Kedah Malaysia College of Art and Sciences, Universiti Utara Malaysia, Sintok 06010 Kedah, Malaysia **Pasifik** Corresponding author: @norliza@sum.edu.my RISSINGUI. This qualitative action research is aimed at improving the handwriting skill of a sto-year-old boy who is studying a the Teacher Education institute's preschool in Kuthang Pasu district via 'GUL' approach. It is a method involving practices to enhance the fine motor skills which could help the child in producing a neater and incire handwriting infalls review was carried out through observation and document analysis to determine the neathess of the handwriting. Observation findings revealed that the student was unable to write neatly. Data collection was conducted through document analysis before and after intervention, fieldnotes, interviews and observation did not extend the intervention process. The data was then analysed using qualitative methods including content and document and document.

keywords: improving, neatness of handwriting, preschooler, GUL

m 🐠 😘 🙉 😘 🔞

2.0 ADVANTAGES

- 1. Meningkatkan minat murid melalui aktiviti yang menarik dan menyeronokkan sehingga tidak sedar sebenarnya telah berlaku pembelajaran melalui aktiviti gunting,uli dan lukis.
- 2. Secara tidak langsung meningkatkan penguasaan kemahiran motor halus.
- 3. Meningkatkan amalan pengajaran guru menjadi lebih baik

4.0 NOVELTY

Penerangan Strategi pengajaran:

Strategi pengajaran ini mempunyai 3 bentuk aktiviti pembelajaran iaitu menggunting, menguli dan melukis sehingga dapat menghasilkan produk tersendiri.

Murid-murid prasekolah yang berumur 6 tahun yang menghadapi kesukaran menulis dengan baik.

Impak strategi pengajaran terhadap kumpulan sasaran:

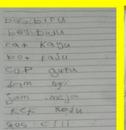
- Meningkatkan penguasaan kemahiran motor halus murid.
- Murid dapat menulis dengan kemas dan cantik.

Kos pelaksanaan:

Pendekatan GUL tidak melibatkan kos pembelian bahan kerana murid menggunakan bahan-bahan sedia ada di rumah.

Selepas intervensi Sebelum

Bas it v bi pu = soni by a beg boyy 3 Bapa bowa bot 1914 4 Jali - cuba cat kays







Penggunaan"PD OTAM" Memberi Kefahaman Kemahiran Operasi Tambah Murid Prasekolah

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Abstract

Pembelajaran matematik memberikan mempunyai peranan yang besar bagi murid prasekolah. Ini kerana penggunaan kemahiran matematik digunakan dengan meluas dalam kehidupan seharian. Kajian tindakan ini adalah untuk memberi pengalaman pembelajaran menggunakan 'PD OTam' (Pembelajaran Digital Operasi Tambah) dalam mengekalkan tumpuan belajar serta memberi lebih kefahaman kemahiran operasi tambah murid prasekolah. Seramai 3 orang murid prasekolah Institut Pendidikan Guru Kampus Darulaman terlibat dalam kajian ini. Tinjauan awal yang telah dilaksanakan adalah menggunakan kaedah pemerhatian dan temu bual. Hasil pemerhatian mendapati kanak-kanak prasekolah tidak memberikan tumpuan dan juga tidak menguasai kemahiran operasi tambah. Data dikumpul melalui pemerhatian sebelum dan selepas intervensi dijalankan, temu bual dan analisis dokumen. Data dianalisis secara kualitatif untuk menjawab persoalan kajian. Triangulasi sumber digunakan untuk menyemak data. Apabila murid prasekolah telah didedahkan dengan 'PD OTam', mereka dapat mengekalkan tumpuan belajar, tingkah laku mereka juga berubah dan kemahiran operasi tambah dapat dipertingkatkan. Dengan ini kajian ini boleh dijadikan satu alternatif untuk membantu guru prasekolah meningkatkan kemahiran operasi tambah murid prasekolah.

Kata Kunci: Matematik, 'PD OTam' (Pembelajaran Digital Operasi Tambah), murid, prasekolah

Penggunaan"PD OTAM" Memberi Kefahaman Kemahiran Operasi Tambah Murid Prasekolah







Pembelajaran Digital Operasi Tambah (PD OTam) TALPI17A

ABSTRACT

engalaman pembelajaran menggunakan 'PD OTam' (Pembelajaran Digital Operasi Tambah) dalam mengekalkan tumpuan belajar serta memberi lebih kefahaman kemahiran operasi tambah murid prasekola

1.0 OBJECTIVES

- 1. Untuk mengukuhkan operasi tambah murid prasekolah apabila menggunakan PD OTam
- 2. Memudahkan ibubapa memberikan bimbingan untuk sesi PdPR
- 3. Untuk memberikan motivasi belajar kepada murid prasekolah
- 4. Menyediakan pembelajaran berbentuk didik hibur kepada murid prasekolah
- 5. Memberi autonomi kepada guru prasekolah untuk mengubahsuai pendekatan sedia ada kepada bentuk digital yang lebih menyeronokkan

2.0 ADVANTAGES

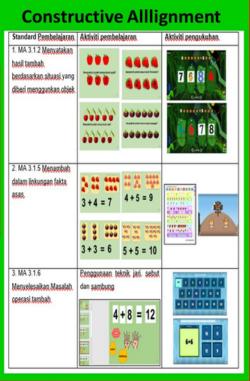
- **Mesra Pengguna**
- **Besifat Interaktif**
- Aktiviti Pembelajaran yang menyeronokkan
- Kefahaman pembelajaran melalui aktiviti pembelajaran dan penilaian
- Tidak melibatkan sebarang kos
- **Boleh diakses dimana-mana** sahaja







4.0 NOVELTY Model Kemmis & Mc Standard Dr. **Taggard (1988)** hasil tambah 2. MA 3.1.5 Menambi 3. MA 3.1.6



5.0 COMMERCIALISATION POTENTIAL

 Produk inovasi ini berpotensi untuk dibangunkan dalam bentuk modul digital dan jadikan aplikasi yang boleh di muat turun dalam play store



Twist Me Tight

Sarsvathy Thirupathy
Dewi Hartini Razali
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Abstract

The purpose of this innovation is to improve the students' basic skills to learn the topics of Subject Verb Agreement errors made by the students 5 Zuhrah in SK Gopeng Jalan Ilmu specifically in the 'Present Tense'. The errors are in the forms of improper use of singular or plural nouns placed as the subject, inappropriate use of verbs, and improper use of verbal and nominal sentences in making present tense. Error analysis technique was carried out in this research in order to find the errors faced by the students in terms of the 'Present Tense', identify the types of errors as well as the sources of the errors. Poor proficiency in basic English Grammar involving 4 basic tenses is a problem that occurs among students, especially Year 5 Zuhrah students. In addition, students are also weak in communication and less active while in class. Therefore, the innovation of Twist- Me- Right is introduced to help students overcome problems involving Grammar especially in the use of S-V-A (Subject-Verb Agreement), Verb-tobe (V-T-B), and Verb-to-have (V-T-H). Twist-Me-Right Innovation is produced with the aim of helping students complete their writings focusing on students' sentences containing subject-verb agreement. The use of Twist- Me -Right is triggered based on several literature reviews. Twist -Me -Right is a tool that consists of 3 rollers, namely personal pronouns, the verb to be, and the action verbs. Data analysis was obtained from the pre-and post-test analysis, observational analysis, and questionnaire analysis. Overall, the students are able to write simple English sentences with correct patterns after using the roller of Twist-Me- Right innovation and understand the concept of each tense better. In addition, learning Grammar in the classroom becomes fun and the 21st-century learning approach can be applied through the innovation of the Twist Me Right.

Keywords: Twist- Me- Right, grammar, subject verb agreement

Twist Me Tight



Empowering English for STEM via an Innovative Mobile Module

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Abstract

The current world opens more pathways to Science, Technology, Engineering, Mathematics (STEM) fields. Though this is the case, STEM learners are not strayed from using the English language. However, schools in Malaysia mainly teach the general English language, and the number of topics related to the growing field of STEM is limited. Since English is too broad, there is a need to empower teaching and learning of English for STEM through an innovative module that is accessible via mobile apps. This innovation is an upgrade version, where the modules inject Mastery Learning and Cognitivism theories via a mobile app. This innovation aims to design and develop English for STEM mobile module focused on secondary school learners. This innovation follows two phases: 1) Analysis and 2) Design and Development. In the first phase, 64 STEM learners were chosen through purposive sampling answered the needs analysis questionnaire. Results portrayed that STEM learners' main problem in English language learning is acquiring vocabulary for specific purposes. Plus, they prefer learning through a mobile application, including multiple-choice questions, gap filling, quizzes, audio-visuals, and problem-solving. The design and development of the storyboard for the mobile modules are based on the theories chosen and the needs analysis result. There are four elements in the mobile module, which are 1) Learning Videos, 2) Practice, 3) Review, and 4) Mini Assessment. These four elements embed the learning activities preferred by learners through the needs analysis questionnaire. Overall, this prototype is the first step in providing learners with a mobile platform that they are most comfortable learning with, specifically during this pandemic. This module is beneficial for STEM learners to learn English for STEM at their own pace as almost everyone owns a mobile device, which allows them to use the supplementary modules freely.

Keywords: STEM, English, Mobile module, secondary school learners

Empowering English for STEM via an Innovative Mobile Module



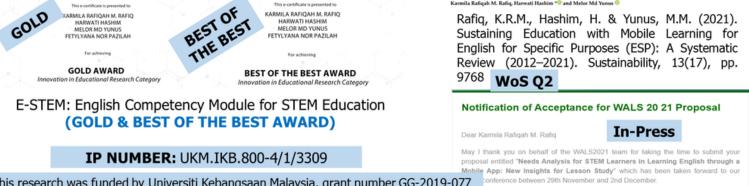


Empowering English for STEM via an Innovative Mobile Module

ABSTRACT

The current world opens more pathways to Science, Technology, Engineering, Mathematics (STEM) fields. Though this is the case, STEM learners are not strayed from using the English language. However, schools in Malaysia mainly teach the general English language, and the number of topics related to the growing field of STEM is limited. Since English is too broad, there is a need to empower teaching and learning of English for STEM through an innovative module that is accessible via mobile apps. This innovation is an upgrade version, where the modules inject Mastery Learning and Cognitivism theories via a mobile app. This innovation aims to design and develop English for STEM mobile module focused on secondary school learners. This innovation follows two phases: 1) Analysis and 2) Design and Development. In the first phase, 64 STEM learners chosen through purposive sampling answered the needs analysis questionnaire. Results portrayed that STEM learners' main problem in English language learning is acquiring vocabulary for specific purposes. Plus, they prefer learning through a mobile application, including multiple-choice questions, gap filling, quizzes, audio-visuals, and problem-solving. The design and development of the storyboard for the mobile modules are based on the theories chosen and the needs analysis result. There are four elements in the mobile module, which are 1) Learning Videos, 2) Practice, 3) Review, and 4) Mini Assessment. These four elements embed the learning activities preferred by learners through the needs analysis questionnaire. Overall, this prototype is the first step in providing learners with a mobile platform that they are most comfortable learning with,







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& Pazilah, F.N. (2020). E-STEM: English

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Futuristic Educational Innovation across Industrial Revolution 4.0, pp. 123-127

e-Proceedings

Module for

Competency

Virtual Guiding Simulator

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Abstract

Previous research suggested that the availability of multimedia and internet technology resulted in a significant shift in educational technology away from teacher-centered learning and toward student-centered learning. Following the COVID-19 pandemic, technology should be used to improve teaching and learning. As evidenced by their use of web and mobile-based applications, the millennial generation prefers a three-dimensional learning environment; Learn-Play-Fun. Educators should be able to examine their practices and make changes based on the needs of their students as well as new teaching and learning standards. Furthermore, many tourism management programmes provide a wide range of courses that require practical training to assess students' knowledge, communication, and practical skills in areas such as tourist guiding technique, travel and tour operation, destination planning and development, and many others. As a result, the Virtual Guiding Simulator (VGS) is a new initiative designed to transform teaching into Learn-Play-Fun. It is a method of teaching and learning that incorporates web, mobile, and entertainment technologies into the classroom. This strategy has been demonstrated to improve students' learning both in and out of the classroom. The VGS is distinctive in that it allows students to prepare for and complete assessments on tourism destination knowledge, communication skills, and tourist guiding ability. The commercialization potential of this product is viable due to its usefulness and benefits to both educational tourism-related courses and tour-guiding programmes offered by colleges, universities, and tourism agencies.

Keywords: Technology, Virtual Guiding Simulator (VGS), Learn-Play-Fun

Virtual Guiding Simulator

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



ABSTRACT

Previous research suggested that the availability of multimedia and internet technology resulted in a significant shift in educational technology away from teacher-centered learning and toward student-centered learning. Following the COVID-19 pandemic, technology should be used to improve teaching and learning. As evidenced by their use of web and mobile-based applications, the millennial generation prefers a three-dimensional learning environment; Learn-Play-Fun. Educators should be able to examine their practices and make changes based on the needs of their students as well as new teaching and learning standards. Furthermore, many tourism management programmes provide a wide range of courses that require practical training to assess students' knowledge, communication, and practical skills in areas such as tourist guiding technique, travel and tour operation, destination planning and development, and many others. As a result, the **Virtual Guiding Simulator (VGS)** is a new initiative designed to transform teaching into Learn-Play-Fun. It is a method of teaching and learning that incorporates web, mobile, and entertainment technologies into the classroom. This strategy has been demonstrated to improve students' learning both in and out of the classroom. The VGS is distinctive in that it allows students to prepare for and complete assessments on tourism destination knowledge, communication skills, and tourist guiding ability. The commercialization potential of this product is viable due to its usefulness and benefits to both educational tourism-related courses and tour-guiding programmes offered by colleges, universities, and tourism agencies.

1.0 OBJECTIVES

- ☐ To provide unique educational and training opportunities in a three-dimensional learning environment; to Learn-Play-Fun.
- ☐ To ease online learners' preparation for and completion of course assignments on distance and online platforms.
- ☐ To facilitate student adaptability to online learning, particularly when teaching is delivered remotely and digitally.

3.0 USEFULNESS

- ☐ The VGS is useful for tourism-related education and training for students and tourist guides, as it improves students' and tour guides' knowledge, communication skills, and guiding abilities.
- ☐ The VGS can be used for learning and practising techniques as many times as needed until one has mastered the art of tourist guide in a classroom or in-house training for travel agencies with cost savvy and time efficiency.

5.0 COMMERCIALISATION POTENTIAL

- ☐ The VGS has the potential to be marketed as a creative education and training tool for the tourism industry. It can be commercialized by tourism-related education and training institutions such as vocational schools, colleges, universities, and tour-guiding certification agencies.
- ☐ The potential for commercialization is also viable as edutourism start-up or new entrance to this market. VGS nurtures convergence capabilities, which gives solutions based on comprehensive knowledge that considers the market, technology, and users in a balanced manner. It aims to solve challenges that arise unexpectedly in the education and training field.

2.0 ADVANTAGES

- □ VGS builds students' resilience in adapting to the changing teaching and learning environment, from physical to virtual or online platforms.
- □ VGS allows students and tour guides to obtain experience and encourage confidence through a series of practice processes that plan, design, and produce in a self-directed way based on acquired knowledge.
- □ VGS promotes leadership that creates opportunities by connecting the internal and external aspects of university-industry initiatives, as well as effective and efficient communication and teamwork management at each stage.
- □ VGS offers virtual cooperation training may complement traditional didactic training by improving performance, time consumption, and cost.

4.0 NOVELTY

- ☐ The VGS is a unique teaching and learning tool, which offers new educational and training platforms.
- ☐ The distinctive features of VGS includes:
- i. adaptability users can create features based on specific locations
- interactivity players in simulators can communicate with one another and create descriptions of tourist attractions
- ii. self-paced learning made up of instructions that progress based on the learner's response and do not require an instructor's immediate response.

6.0 INVENTORS



Alfian Bin Thomas
(Department of Polytechnic & Community)



Assoc. Prof. Dr. Hassnah Wee (Faculty of Hotel & Tourism Management, Universiti Teknologi MARA, Puncak Alam)

Gather Town Website as Education on Platform

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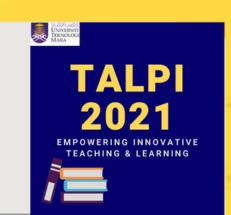
Abstract

In addition to early childhood through high school (secondary education), teacher preparation, and higher education pertaining to teacher professional development and/or learning education are all topics covered in the journal. Teachers and students were required to work from home during the COVID-19 pandemic. As a result, the teaching and learning system may be confronted with the challenge of two-way communication. Furthermore, by using the same medium over and over again can make the learning session quite monotonous. The introduction of the Gather Town website has been made in order to address this issue. Prior to this, it was only used by a small number of people from other countries in the gaming industry. The concept of Gather Town is extremely applicable in order to overcome the issues listed above. The first goal is to make the learning system more accessible to students during the online phase. It is possible to foster a professional attitude in teaching and learning in the following step: Gather Town. Additionally, it is appropriate for use in order to make learning time more enjoyable. Furthermore, students and teachers can participate in a variety of activities such as exploration, camping, and other similar activities. As a result, the teacher must conduct the session in the same manner as a face-to-face session. In a nutshell, Teaching and Learning Education is a multidisciplinary magazine dedicated to no single strategy, subject, methodology, or paradigm in its publication process. So, as the objectives achieved, they also can create more creative situations in online session.

Keywords: Gather Town website, creative situations, professional attitude

Gather Town Website as Education on Platform

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



GATHER TOWN WEBSITE AS EDUCATION PLATFORM

1.0 ABSTRACT

Teachers and students were required to work from home during the COVID-19 situation. As a result, the teaching and learning system may be confronted with the challenge of two-way communication. Furthermore, using the same medium over and over again can make the learning session quite monotonous. The introduction of the gather town website has been made in order to address this issue. The first goal is to make the learning system more accessible to students during the online phase. It is possible to foster a professional attitude in teaching and learning in the following step: gather Furthermore, students and teachers can participate in a variety of activities such as exploration, camping, and other similar activities. So, as the objectives achieved, they also can create more creative situations in online session.

OBJECTIVES

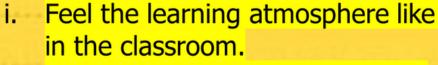
Facilitate the learning system during the online phase.

- ii. Foster a professional attitude in teaching and learning.
- iii. Create fun in learning time.

4.0 USEFULNESS

- i. Modern Presentation Method.
- ii. Illustrative presentation of materials.
- iii. More exposed to practicalities and applications.
- iv. Variety of reference materials used.
- v. Do physical and outdoor activities such as camping.

3.0 ADVANTAGES



- ii. More effective delivery methods.
- iii. Creating a sense of fun in learning.

5.0 NOVELTY

This method realizes the diversity of learning systems in terms of delivery and reference materials and the surrounding environment.

7.0 INVENTORS

Gather Town app innovation

6.0 COMMERCIALISATION POTENTIAL

This method can be used to make outdoor activities.

Harli's Gybeeel

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Abstract

Harli's M GyBeeEL merupakan aplikasi digital (game based learning) yang dibina lanjutan daripada penambahbaikan Harli's M dari aspek kandungan, reka letak dan warna yang lebih menarik bagi proses pengajaran dan pembelajaran terhadap siswa Institut Pendidikan Guru terutamanya dalam tempoh pandemik Covid -19 bersandarkan penilaian pakar terdahulu dan maklum balas peserta kajian terhadap inovasi ini dengan dijelmakan sebagai Harli's M GyBeel Produk ini melibatkan perjalanan permainan 4 Fasa yang perlu ditempuhi bermula daripada Fasa mudah, sederhana dan sukar gabungan genially dan edpuzzle. Fasa terakhir merupakan kemuncak untuk melihat perubahan tingkah laku dan pemikiran kritis berpandukan rangsangan bahan video edpuzzle. Pelaksanaan ini berfokus kepada pengaplikasian digital sebagai pemudah cara dalam subjek Sejarah selari dengan hasil pembelajaran yang memfokuskan kepada keupayaan pelajar untuk menjustifikasikan kepentingan menjaga kedaulatan negara. Pemilihan medium pembelajaran berasaskan permainan ini yang boleh diulang-ulang penggunaannya, di mana-mana sahaja bertujuan mengukuhkan konsep pengetahuan disiplin ilmu Sejarah yang melibatkan aspek kognitif dan tingkah laku (jati diri) di samping dapat mencetuskan pemikiran kreatif dan kritis serta meningkatkan motivasi dalam suasana pembelajaran yang menyeronokkan. Model ASSURE dirujuk sebagai panduan pembinaan inovasi ini. HARLi's-M ini juga telah dinilai oleh 10 penilai luar dan seterusnya diuji kepada 21 pelajar bagi melihat kesan daripada bahan inovasi terhadap tingkah laku pelajar dalam aspek jati diri dan perluasan idea yang kritis. Kesimpulannya, aplikasi digital yang direka dengan memberikan sepenuh kebebasan kepada pengkaji membuktikan bahawa wujudnya pembangunan kurikulum berasaskan sekolah dengan berpandukan kepada penjajaran konstruk (Constructive Alignment) agar pendidik dapat mengubah suai dengan situasi semasa krisis pandemik ini.

Kata Kunci: Harli's M GyBeel, aplikasi digital, model ASSURE

Harli's Gybeeel

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



HARLI'S GYBEEEL - TALPI22A



PRODUK INI MERUPAKAN APLIKASI DIGITAL YANG MENGGUNAKAN GABUNGAN APLIKASI GENIALLY DAN EDPUZZLE. HARLI'S GYBEEEL IALAH PENAMBAHBAIKAN DARIPADA HARLIS' M

1.0 OBJECTIVES

- mengukuhkan konsep pengetahuan disiplin ilmu Sejarah yang melibatkan aspek kognitif dan tingkah laku (jati diri) di samping dapat mencetuskan pemikiran kreatif dan kritis
- memudahkan pendidik dan pelajar menggunakan aplikasi sebagai pemudahcara PdP.
- meningkatkan motivasi dalam suasana pembelajaran yang menyeronokkan memberikan peluang dan autonomi kepada tenaga pengajar untuk mengubah suai

pendekatan dan strategi yang bersesuaian dengan tahap pelajar





2.0 ADVANTAGES

A.Set panduan lengkap bagi kegunaan proses pengajaran dan pembelajaran berkaitan topik. B.Bahan interaktif yang memudahkan pendidik dan pelajar mengakses tanpa sempadan. C.Interaktif secara dalam talian yang boleh diulang penggunaan bagi mengukuhkan konsep disiplin Sejarah.

D.Meningkatkan dan memupuk jati diri pelajar terhadap kepentingan menjaga kedaulatan

E.Ansur maju untuk membentuk pemikiran kritis dan penjanaan idea yang mendalam. EMemupuk daya saing pelajar untuk menggunakan aplikasi dalam suasana pembelajaran yang menyeronokkan.

Penerangan Inovasi/Prototaip:

-Inovasi ini sepenuhnya merupakan aplikasi digital interaktif pembelajaran berasaskan 🏻 permainan

Genially merupakan medium interaktif yang terkandung di dalamnya beberapa aplikasi seperti edpuzzle dan genially (game based learning)

-Inovasi ini mempunyai 4 fasa yang perlu dilalui oleh pelajar sehingga penamat bermula 🏻 fasa mudah kepada fasa sukar

Bidang utama dan kumpulan sasar:

Sampel ialah pelajar PISMP Sejarah semester 1 dan semester lain.

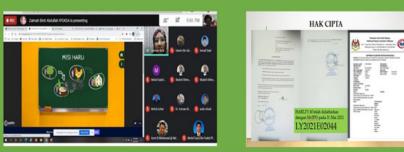
Tenaga pengajar kursus Sejarah yang memerlukan panduan untuk melaksanakan proses pengajaran dan pembelajaran menggunakan medium internet.

Impak inovasi terhadap kumpulan sasar:

Membina keyakinan diri untuk mengemukakan idea yang meluas berdasarkan bahan rangsangan. Menarik minat pelajar untuk belajar sambil bermain mengikut cabaran-cabaran dalam aplikasi sehingga

Boleh diulang-ulang penggunaannya dan boleh ditambah baik dari semasa ke semasa Kos pelaksanaan projek:

Inovasi ini tidak melibatkan kos pembelian bahan kerana menggunakan sepenuhnya aplikasi internet Kos untuk proses mendapatkan hak cipta melalui MyIPO dan kos Pesyuruhjaya Sumpah bagi akuan hak milik sangat berpatutan.





MAPQUIPO 2.0

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Abstrak

Mapquipo merupakan satu inovasi yang telah diilhamkan melalui permainan papan seperti Monopoly dan sebagainya. Tujuan penghasilannya adalah bagi membantu murid menguasai topik melalui pengajaran bersifat kronologi di samping membolehkan guru mempunyai alternatif semasa mengajar. Penciptaan inovasi ini adalah hasil pemerhatian pengkaji sendiri semasa menjalani Pembelajaran Berasaskan Sekolah 1 (PBS) di mana guru sukar menghasilkan satu suasana PdP yang interaktif serta bermakna susulan pengaplikasian pembelajaran di rumah atau "PdPr" akibat daripada pandemik Covid-19. Inovasi ini merupakan suatu alat bantu mengajar yang membolehkan murid bekerjasama dalam sebuah kumpulan untuk memberi idea dan pandangan yang akan dinilai oleh guru secara terus melalui persoalan dan permainan yang dilakukan. Pengkaji telah menambah baik inovasi ini melalui dapatan reka bentuk kualitatif yang dilaksanakan kepada beberapa orang guru sebagai responden kajian rintis bagi mengesan keberkesanan alat inovasi ini. Respon dan maklum balas responden terbabit digunakan untuk menambah baik Mapquipo ini. Sasaran aplikasi digital ini ialah kepada murid Tahun 6 subjek Sejarah Tajuk 10, Topik 2 iaitu "Negeri-Negeri di Malaysia". Maka inovasi ini telah dihasilkan dengan menggabungkan elemen papan permainan dan animasi menggunakan teknologi digital. Murid akan ditunjukkan sebuah animasi yang bertemakan topik pembelajaran serta mempunyai informasi dan fakta topik. Ini dapat meningkatkan penguasaan murid kerana mereka lebih berfokus dan tertarik dengan animasi yang ditunjukkan dan secara tidak langsung akan mendapat informasi dan fakta berkenaan topik. Seterusnya, guru akan menggunakan papan permainan digital untuk menilai murid secara berkumpulan tentang topik dipelajari. Jika dilihat, jelas bahawa beberapa Kemahiran Pemikiran Sejarah (KPS) telah diterapkan dalam inovasi ini iaitu memahami kronologi dan membuat imaginasi. Hasil dapatan kajian mendapati bahawa murid dapat menjustifikasikan idea dengan kritis dan menguasai topik pembelajaran menggunakan Mapquipo. Keseluruhannya, inovasi ini dapat diketengahkan kepada semua guru untuk merealisasikan penguasaan revolusi industri 4.0 bagi menyediakan murid agar mampu bersaing pada peringkat global.

Kata Kunci: Pengaplikasian, animasi,Pembelajaran Berasaskan Sekolah (PBS) Kemahiran Pemikiran Sejarah (KPS)

MAPQUIPO 2.0



TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021





MAPQUIPO 2.0

ABSTRAK

Mapquipo merupakan satu inovasi yang telah diilhamkan melalui permainan papan seperti monopoly dan sebagainya. Kemahiran Pemikiran Sejarah (KPS) telah diterapkan dalam Inovasi ini iaitu memahami kronologi dan membuat imaginasi. Inovasi ini dapat diketengahkan kepada semua guru untuk merealisasikan penguasaan revolusi industri 4.0 bagi menyediakan murid agar mampu bersaing pada peringkat global.

OBJEKTIF

- Menerapkan Kemahiran Pemikiran Sejarah (KPS) iaitu memahami kronologi dan membuat imaginasi
- Mengaplikasikan kaedah pembelajaran abad ke-21 seperti berpusatkan murid
- Memberi pendedahan mendalam kepada murid berkenaan sejarah negeri

KEGUNAAN Graf menunjukkan keberkesanan inovasi MAPQUIPO

KEBAIKAN

- Mudah dikendalikan
- Terperinci dan sistematik
- Mudah didapati dan dihasilkan
- Bersifat interaktif dan menarik
- Menekankan elemen Seni Dalam Pendidikan

NOVELTY

- Meningkatkan keberkesanan pengajaran guru terhadap Topik "Negeri-Negari di malaysia" bagi tahun 6.
- Penggunaan animasi dan papan permainan digital.
- Pendaftaran Mylpo (LY2021E02045)

PROTOTALP



POTENSI KOMERSIAL

- Panduan dan bahan pengajaran guru dalam pendidikan Sejarah
- Menjadi pemudahcara guru dalam melaksanakan pengajaran secara dalam talian
- Membantu guru dalam pengawalan masa mengajar
- Medium untuk menguji kefahaman murid berkaitan topik Sejarah
- Berperanan sebagai bahan untuk mempromosikan Malaysia di persada antarabangsa



PUAN ZAIMAH BINTI

INVENTORS

NUR HUSNINA BINTI

AHMAD NASRAN BIN

MOHD ZAHARI



AHMAD NIZAR

The Development of Vocational Wellbeing Taxonomy for Skilled Workers

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Abstract

This study identifies the relevant vocational skills domains in developing vocational wellbeing taxonomy to produce high-quality skilled workers and enhance their wellbeing. The Industrial Revolution 5.0 and the Coronavirus disease pandemic caused unprecedented disruption in education and training and have given rise to new vocational training. These disruptions necessitated many skilled workers with specialized skills to develop the industrial and economic sectors. Given the massive impact of technological changes and the post-pandemic era on the labor market, vocational education is a way for workers to adapt to technological change, build upon, improve, or even change their skill sets and keep up with the labor market requirements through training. However, there are still challenges to overcome, including the lack of skilled workers and hands-on skills that are also salient to be competent in the field. In academic education, Bloom's taxonomy does not meet the principles for assessing "wellbeing" via vocational skills to get a job in highly skilled fields. The concept of wellbeing is closely linked to human capital that could be translated into individual skills, as highlighted in TVET. Unlike academic or liberal education, vocational education involves developing all aspects of individual competence to function well in the workplace. Thus, vocational wellbeing taxonomy is essential to provide a framework for determining objectives and evaluating learning outcomes related to vocational education. This taxonomy needs attention and is important to developing a comprehensive vocational curriculum as TVET can prepare a highly-skilled workforce. The vocational skills domains are classified as vocational wellbeing taxonomy and are expected to contribute to workers' wellbeing and sustainability and equip secondary school graduates and working adults with relevant skills and knowledge to improve the employability of low middle-skilled workers. Due to this, an extensive review of the relevant literature and theories on vocational and wellbeing index is needed.

Keywords: Vocational Wellbeing Taxonomy, vocational skills, TVET, skilled workers, wellbeing

The Development of Vocational Wellbeing Taxonomy for Skilled Workers



THE DEVELOPMENT OF VOCATIONAL WELLBEING TAXONOMY FOR SKILLED WORK

skills

1. OBJECTIVES

Develop a new taxonomy of vocational wellbeing for skilled workers
 Identify the vocational skills domains to produce high-quality skilled workers and enhance their wellbeing.

3. USEFULNESS

- Serve as a reference for skilled workers to determine the appropriate competencies – practical contribution
- Serve as a reference material for implementing vocational education systems – knowledge contribution
- Serve as a standard metric for policymakers policy

5. COMMERCIALIZATION

- Produce a new wellbeing index that can be used by the government and other agencies for profiling and mapping the human capital of skilled workers (k-workers) in Malaysia.
- Produce a new taxonomy namely Vocational Wellbeing Taxonomy (replacing Bloom's Taxonomy) to be adopted by TVET.

2. ADVANTAGES

- VWT's importance in enhancing the wellbeing of workers through mastery of vocational skills.
- the development of VWT is expected to help identify the talent or vocational talents needed by the State for the wellbeing of the people.

4. NOVELTY

- Significant impact on the success of the National Transformation Agenda 2050.
- Provide baseline data to see the pattern of over 12 million skilled workers in Malaysia.

6. INVENTORS

















E-Learning Gamification in Physics Subject for SPM Students

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Abstract

Due to the COVID-19 pandemic, e-Learning has become more critical, especially the electronic tools in the teaching and learning process for both teacher and students. Generally, most pure science subjects like Physics for the Form 4 and 5 students required to be seated for SPM examination are complex subjects. Most SPM students find that particular concept in physics is tough to study and difficult to understand without proper guidelines from the teachers. Hence, using the gamification approach in eLearning is one of the most cutting-edge ways to improve and assist the engagement of the learning process to be more effective. Gamification uses game elements such as points, levelling, leader boards, competition, game mechanics, and stories to motivate and train people to understand specific topics. Thus, a web-based e-Learning gamification application focused on the Electromagnetism topic for Physic subject has been developed. A word search of puzzle games would be part of the gamification that can give students experience and polish their comprehension and memory strength in the learning process. Besides that, interactive notes were also provided for the students as references. The results obtained after a series of analyses are used to determine the findings, limitations, and recommendations for future study improvement. According to the findings, gamification is becoming more widely accepted as a helpful learning tool for creating more engaging educational environments. Therefore, the outcome from this project is the complete production of an e-learning gamification application that is successful with a great experience and interaction with the students.

Keywords: E-Learning, physics, electromagnetism, gamification, puzzle game, educational, web-based gamification.

E-Learning Gamification in Physics Subject for SPM Students



Aplikasi Mudah Doa

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Abstract

Aplikasi Mudah Doa dicipta dan dimuatkan ke Google Play Store secara percuma sebagai kegunaan guru, pelajar dan pengguna muslim secara umumnya bagi membaca dan merujuk doa dengan mudah dan lancar. Produk ini dibina bagi menyelesaikan masalah harian yang berlaku dalam konteks mengetuai bacaan doa majlis. Hal ini didapati daripada pengalaman dan tinjauan ringkas yang dijalankan dimana pembaca doa diminta secara spontan untuk membaca doa majlis. Hasilnya, doa majlis tersebut dibaca dalam Bahasa Arab dan tidak difahami oleh pendengar. Justeru, bagi membantu menyediakan teks doa yang mudah diakses dan menjadikan ia sebagai satu pendidikan kepada masyarakat, aplikasi Mudah Doa adalah jalan penyelesaiannya. Inovasi ini dibangunkan dengan berpandukan kepada Model Penyelesaian Polya (1957). Kajian rintis yang ringkas beserta ujian awal produk dijalankan dengan skala kecil kepada responden terpilih. Produk ini memuatkan pelbagai koleksi doa yang boleh dipilih berdasarkan kepada situasi pembaca. Produk ini juga telah mengalami beberapa perubahan atas cadangan daripada pengguna. Selain dari merealisasikan aspirasi Pendidikan Islam ke arah Revolusi Industri 4.0 dalam Pendidikan, ia juga dapat memperkasakan teknologi dalam Pendidikan Islam seiring dengan bidang-bidang yang lain. Produk ini telah dimuat turun dan digunakan oleh lebih daripada 1000 orang dalam pasaran terbuka. Produk ini juga mampu meningkatkan keberkesanan dari sudut rujukan teks bacaan doa yang sesuai bagi setiap majlis dengan cepat dan berkesan serta tidak memerlukan rangkaian internet. Selain tu, ia juga boleh dijadikan sebagai inisiatif kepada seseorang yang ingin menghafal doa-doa dengan bahan yang mudah diakses. Inovasi ini juga merupakan satu projek Jabatan Pendidikan Islam IPGKBA bagi mewujudkan budaya wakaf ilmu dalam kalangan guru pelatih Pendidikan Islam. Akhirnya, dengan adanya inovasi Mudah Doa ini diharapkan dapat memberi manfaat dan memudahkan setiap individu khususnya kepada warga pendidik dari segi masa serta tenaga dalam merujuk dan membaca doa-doa bagi setiap aktiviti yang dilakukan.

Kata Kunci: Aplikasi Mudah Doa, teks doa, majlis

Aplikasi Mudah Doa

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



Abstrak

Aplikasi Mudah Doa dicipta dan dimuatkan ke Google Play Store secara percuma sebagai kegunaan guru, pelajar dan pengguna muslim secara umumnya bagi membaca dan merujuk doa dengan mudah dan lancar. Produk ini dibina bagi menyelesaikan masalah harian yang berlaku dalam konteks mengetuai bacaan doa majlis. Hal ini didapati daripada pengalaman dan tinjauan ringkas yang dijalankan dimana pembaca doa diminta secara spontan untuk membaca doa majlis. Hasilnya, doa majlis tersebut dibaca dalam Bahasa Arab dan tidak difahami oleh pendengar. Justeru, bagi membantu menyediakan teks doa yang mudah diakses dan menjadikan ia sebagai satu pendidikan kepada masyarakat, aplikasi Mudah Doa adalah jalan penyelesaiannya. Inovasi ini dibangunkan dengan berpandukan kepada Model Penyelesaian Polya (1957). Kajian rintis yang ringkas beserta ujian awal produk dijalankan dengan skala kecil kepada responden terpilih. Produk ini memuatkan pelbagai koleksi doa yang boleh dipilih berdasarkan kepada situasi pembaca. Produk ini juga telah mengalami beberapa perubahan atas cadangan daripada pengguna. Selain dari merealisasikan aspirasi Pendidikan Islam ke arah Revolusi Industri 4.0 dalam Pendidikan, ia juga dapat memperkasakan teknologi dalam Pendidikan Islam seiring dengan bidang-bidang yang lain. Produk ini telah dimuat turun dan digunakan oleh lebih daripada 1000 orang dalam pasaran terbuka. Produk ini juga mampu meningkatkan keberkesanan dari sudut rujukan teks bacaan doa yang sesuai bagi setiap majlis dengan cepat dan berkesan serta tidak memerlukan rangkaian internet. Selain tu, ia juga boleh dijadikan sebagai inisiatif kepada seseorang yang ingin menghafal doa-doa dengan bahan yang mudah diakses. Inovasi ini juga merupakan satu projek Jabatan Pendidikan Islam IPGKBA bagi mewujudkan budaya wakaf ilmu dalam kalangan guru pelatih Pendidikan Islam. Akhirnya, dengan adanya inovasi Mudah Doa ini diharapkan dapat memberi manfaat dan memudahkan setiap individu khususnya kepada warga pendidik dari segi masa serta tenaga dalam merujuk dan membaca doa-doa bagi setiap aktiviti yang dilakukan.

Aplikasi Mudah Doa

Muhammad Luqman Shabri, Muhammad 'Izzuddin Zainol Abidin, Amna Hawa Ishak, Nur Anisah Anuar, Amiyamin Hi Mohamad Yusop IPG Kampus Bahasa Antarabangsa Kuala Lumpur

Objektif

- Menempatkan panduan mudah doa yang interaktif di Google Play Store
- Memudahkan pengguna untuk merujuk dan mengakses sebagai panduan yang lengkap.
- Memperkasakan Pendidikan Islam dan pendidikan secara amnya dalam abad ke-21

Kegunaan

- Menyediakan koleksi doa yang bersesuaian dengan pelbagai majlis, program atau aktiviti.
- Panduan kepada pengguna untuk memilih doa mengikut kesesuaian majlis.

Potensi Pasaran

- Produk ini mempunyai nilai komersial yang tinggi.
- -Walaubagaimanapun ia merupakan perkongsian dengan tujuan memperbaiki proses dan kualiti Pendidikan Islam dan capaian maklumat secara percuma di Google Play Store.
- Inventors hanya perlu meletakkan harga untuk dijual di Google Play Store sekiranya ianya ingin dikomersialkan.

Kelebihan

Akses - Setelah di "pasang", berupaya digunakan di manamana sahaja tanpa memerlukan rangkaian internet (offline).

Storage - Menggunakan storage telefon yang kecil.

Kos - Boleh di muat turun secara percuma di Google Play.

Teknologi - Menepati keadaan semasa dan merancakkan lagi perkembangan pendidikan Islam melalui aplikasi android.

Covid-19 - Menepati keadaan norma baharu dalam penggunaan dan manfaat teknologi.

Keaslian

Idea bagi menghasilkan aplikasi ini adalah asli berdasarkan gabungan perbincangan bersama rakan, keluarga dan amalan diri sendiri bagi menyelesaikan masalah yang dihadapi. Ketulenan penghasilan produk ini dibuktikan dengan keupayaannya melepasi piawaian antarabangsa pemain teknologi iaitu Google. Produk ini melepasi semakan antarabangsa yang ditetapkan oleh Google Play Store untuk diterbitkan sebagai aplikasi dengan content rating 3+ oleh IARC certificate dengan ID 10180e0d-3cd2-465c-9000c7c7e598aee.

Inventors

- 1) Muhammad Luqman bin Shabri
- 2) Muhammad 'Izzuddin bin Zainol Abidin
 - 3) Amna Hawa binti Ishak
 - 4) Nur Anisah binti Anuar
- 5) Amiyamin bin Hj Mohamad Yusop

"MUK'ABAT BI-TASRIF"

Norazmah Awang Hasrulnizam Hasan Hanin Nurfatiha Hasrulnizam Amni Wajieha Zainuddin Maryam Nor Zaidi5

SMK Agama Sik, Kedah

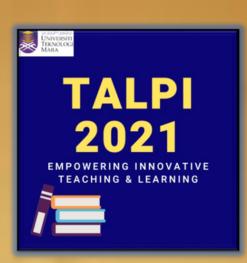
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Abstrak

Antara bahagian yang penting bagi para pelajar untuk menguasai Bahasa Arab ialah pelajar-pelajar mestilah menguasai, memahami dan mengingati Dhomir dan Tasrif al-Af'al dengan sebaiknya. Kurangnya kemampuan untuk menguasai bahagian ini, menyebabkan potensi pelajar untuk mendapat markah yang cemerlang menjadi sukar. Antara faktor yang menyebabkan para pelajar tidak dapat menguasai kemahiran ini ialah, kurangnya kemampuan untuk menguasai, memahami, mengingati Dhomir dan Tasrif al-Af'al dengan sebaiknya. Mereka juga kurang kecekapan untuk mengaplikasinya dalam soalan-soalan yang berkaitan. Maka, saya telah menghasilkan satu inovasi untuk membolehkan pelajar-pelajar menguasai bahagian ini dengan lebih mudah. Inovasi yang dihasilkan dinamakan sebagai "Muk'abat Bi-Tasrif " (بالتصريف مكعبات). Ianya merupakan susunan blok-blok berwarna-warni yang menarik dan ditulis dengan Tasrif al-Af'al beserta Dhomir dalam Bahasa Arab. Susunan blok seperti bangunan dengan perbezaan tingkat dan warna bagi membezakan bilangan dan kategori dhomir. Produk inovasi ini saya namakan sebagai "Muk'abat Bi-Tasrif". Saya hasilkan inovasi ini sebagai ABM dalam bentuk Game Based Learning (non-digital). Tujuan inovasi ini dihasilkan ialah supaya para pelajar mempunyai kemahiran untuk menguasai dan memahami Dhomir dan Tasrif al-Af'al dan mengingatinya dengan mudah. Penguasaan ini membolehkan mereka mengaplikasinya semasa menjawab soalansoalan berkaitan. Ianya juga bertujuan menarik minat para pelajar untuk mempelajari Bahasa Arab. Di samping itu, dapat melaksanakan aktiviti PAK-21 semasa PdPc dengan penglibatan pelajar secara aktif dalam sesi pembelajaran. Inovasi ini mempunyai potensi yang luas untuk disebarluaskan kepada pihak lain kerana beberapa faktor antaranya, kos yang murah, produk yang menarik dan praktikal, menjadi bahan ABM dalam bentuk Game Based Learning. lanya juga merupakan produk yang dapat memberi impak yang positif. Setelah inovasi ini diperkenalkan dikalangan pelajar, saya mendapati mereka dapat menguasai, memahami dan mengingati Dhomir dan Tasrif al-Af'al dengan lebih mudah. Mereka juga dapat mengaplikasinya semasa menjawab soalan-soalan yang berkaitan. Dengan ini, saya juga mendapati berlaku peningkatan prestasi pelajar dalam mata pelajaran Bahasa Arab.

Kata Kunci: Muk'abat Bi-Tasrif , Bahasa Arab , ABM, 'Game Based Learning'

"MUK'ABAT BI-TASRIF"



TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



" MUK'ABAT BI-TASRIF"

Norazmah Binti Awang¹, Hasrulnizam Bin Hasan², Hanin Nurfatiha Binti Hasrulnizam³, Amni Wajieha Binti Zainuddin⁴, Maryam Binti Nor Zaidi⁵

ABSTRACT

"Muk'abat Bi-Tasrif" (مكعبات بالتصريف) merupakan produk inovasi yang dihasilkan sebagai ABM dalam bentuk Game Based Learning (non-digital). lanya merupakan susunan blok-blok berwarna-warni yang menarik dan ditulis dengan Tasrif al-Af'al beserta Dhomir dalam Bahasa Arab. Susunan blok seperti bangunan dengan perbezaan tingkat dan warna bagi membezakan bilangan dan kategori dhomir. Produk ABM ini diaplikasi bagi meningkatkan kemahiran pelajar dalam menguasai, memahami Dhomir dan Tasrif al-Af'al serta mengingatinya dengan mudah.

1.0 OBJECTIVES

- Meningkatkan kemahiran pelajar untuk menguasai dan memahami Dhomir dan Tasrif al-Af'al serta mengingatinya dengan mudah.
- Membantu pelajar mengaplikasi kemahiran semasa menjawab soalan-soalan berkaitan dan meningkatkan prestasi pelajar dalam mata pelajaran Bahasa Arab.
- Menarik minat para pelajar untuk mempelajari Bahasa Arab melalui ABM dalam bentuk Game Based Learning yang menarik dan praktikal.
- ❖ Dapat melaksanakan aktiviti PAK-21 semasa PdPc dengan penglibatan pelajar secara aktif dalam sesi pembelajaran.
- Mewujudkan suasana pembelajaran yang menarik.

3.0 USEFULNESS

- Menjadi ABM dalam bentuk Game Based Learning yang menarik dan dapat diaplikasi pelajar bagi meningkatkan kemahiran dalam topik yang berkaitan.
- ❖ Meningkatkan kemahiran pelajar untuk menguasai dan memahami Dhomir dan Tasrif al-Af'al serta mengingatinya dengan mudah.
- ❖ Boleh digunakan untuk pelajar-pelajar yang mempelajari Bahasa Arab bagi peringkat sekolah menengah.

5.0 COMMERCIALISATION POTENTIAL

- Untuk penggunan di sekolah menengah secara khususnya dan kepada pelajar yang mempelajari Bahasa Arab secara umumnya.
- ❖ Sebagai bahan ABM untuk guru dan dapat digunakan dalam melaksanakan aktiviti PAK-21.
- ❖ Kos penghasilan yang murah dan produk yang praktikal untuk digunakan sebagai ABM.
- Produk yang dapat memberi impak yang positif.

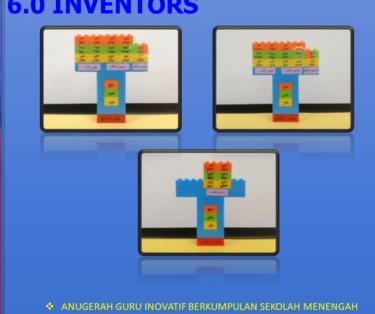
2.0 ADVANTAGES

- Permainan Game Based Learning yang membantu pelajar mengingati formula yang berkaitan dengan mudah.
- Produk yang senang diaplikasi dan praktikal.

4.0 NOVELTY

- ❖ Produk dalam bentuk Game Based Learning yang direka guru bagi membantu penguasaan pelajar dalam mengingati formula bagi Dhomir dan Tasrif al-Af'al.
- Idea ciptaan produk melalui hasil kajian tindakan yang dibuat oleh guru.
- Menyertai pertandingan inovasi di peringkat daerah, negeri dan antarabangsa.

6.0 INVENTORS



- ❖ TEMPAT KETIGA PERTANDINGAN INOVATIF BERKUMPULAN SEKOLAH
- MENYERTAI PERTANDINGAN INOVASI PERINGKAT DAERAH, NEGERI

E-Safinatun Naja

Ahmad Hafizudin Ahmad Nizal Hazeeq Zarkashi Mohd Zaki Muhamad Akif Akbar Abdullah Amiyamn Mohd Yusop

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Abstrakt

Inovasi E-SAFINATUN NAJA merupakan sebuah aplikasi telefon pintar yang dinamakan "Mudah Safinatun Najah" hasil terjemahan kitab fiqh yang masyhur kepada sebuah aplikasi telefon pintar oleh sekumpulan pelajar dari IPG Kampus Bahasa Antarabangsa. Aplikasi ini merupakan terjemahan dari kitab Safinatun Najah hasil karya Syeikh Salim Samir al-Hadromi asy-Syafi'e untuk dijadikan rujukan. Dalam pasca Revolusi Industri 4.0 ini, bahan rujukan melalui platform digital adalah lebih praktikal berbanding bahan rujukan berbentuk fizikal. Malah, dengan situasi pandemik yang melanda dunia ketika ini. Penggunaan bahan rujukan melalui platform digital sangat bertepatan dengan pergerakan yang terbatas untuk mendapatkan bahan rujukan. Oleh sebab itu, aplikasi ini merupakan satu inisiatif bagi membantu pelajar merujuk nota yang disusun dalam aplikasi secara percuma yang dinaiktaraf dengan penambahan persoalan fiqh semasa. Aplikasi ini dibina untuk memudahkan pelajar mengakses bahan pembelajaran melalui telefon pintar mereka. Pelajar boleh muat turun aplikasi ini secara percuma di Google Play Store. Aplikasi ini juga berupaya untuk beroperasi tanpa data internet semasa penggunaanya. Aplikasi ini juga membantu guru untuk menjayakan kaedah flipped classroom dan blended learning. Hasil dapatan dari beberapa pengguna menunjukkan kaedah penggunaan aplikasi ini sangat mudah dan tidak merumitkan. Pembaca boleh memilih dengan mudah bab yang ingin dibaca tanpa perlu menyelak helaian. Aplikasi ini tidak dikomersialkan memandangkan niat utamanya adalah untuk membantu pelajar mudah untuk mengakses kepada bahan pembelajaran secara percuma.

Kata Kunci: Terjemahan, Revolusi Industri 4.0, platform digital, fiqh, mudah

E-Safinatun Naja

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



Abstrak

Inovasi E-SAFINATUN NAJA merupakan sebuah aplikasi telefon pintar yang dinamakan "Mudah Safinatun Najah" hasil terjemahan kitab fiqh yang masyhur kepada sebuah aplikasi telefon pintar oleh sekumpulan pelajar dari IPG Kampus Bahasa Antarabangsa. Aplikasi ini merupakan terjemahan dari kitab Safinatun Najah hasil karya Syeikh Salim Samir al-Hadromi asy-Syafi'e untuk dijadikan rujukan. Dalam pasca Revolusi Industri 4.0 ini, bahan rujukan melalui platform digital adalah lebih praktikal berbanding bahan rujukan berbentuk fizikal. Malah, dengan situasi pandemik yang melanda dunia ketika ini. Penggunaan bahan rujukan melalui platform digital sangat bertepatan dengan pergerakan yang terbatas untuk mendapatkan bahan rujukan. Oleh sebab itu, aplikasi ini merupakan satu inisiatif bagi membantu pelajar merujuk nota yang disusun dalam aplikasi secara percuma yang dinaiktaraf dengan penambahan persoalan fiqh semasa. Aplikasi ini dibina supaya pelajar mudah akses kepada bahan pembelajaran melalui telefon pintar mereka. Pelajar boleh muat turun aplikasi ini secara percuma di Google Play Store. Aplikasi ini juga berupaya untuk beroperasi tanpa data internet semasa penggunaanya. Aplikasi ini juga membantu guru untuk menjayakan kaedah flipped classroom dan blended learning. Hasil dapatan dari beberapa pengguna menunjukkan kaedah penggunaan aplikasi ini sangat mudah dan tidak merumitkan. Pembaca boleh memilih dengan mudah bab yang ingin dibaca tanpa perlu menyelak helaian. Aplikasi ini tidak dikomersialkan memandangkan niat utamanya adalah untuk membantu pelajar mudah untuk mengakses kepada bahan pembelajaran secara percuma.



Inventors

AHMAD HAFIZUDIN BIN AHMAD NIZAL MUHAMAD AKIF AKBAR BIN ABDULLAH HAZEEQ ZARKASHI BIN MOHD ZAKI AMIYAMIN BIN HJ. MOHD YUSOP



Kelebihan

- **KEGUNAAN** Penggunaan aplikasi secara percuma.
 - · Boleh digunakan secara offline setelah dimuat turun.
- MOBILITI Boleh dibawa kemana-mana sahaja
- **SUMBER** Mengandungi rujukan yang tepat
 - Hasil kerja pelajar-pelajar pendidikan Islam



COVID-19 • Menepati keadaan norma baharu dalam penggunaan dan manfaat teknologi.

Objektif

- · Penggunaan sumber pembelajaran terkini yang selari dengan perkembangan abad ke-21.
- · Selari dengan generasi masa kini.
- · Memudahkan proses penyimpanan dan akses kepada maklumat.

Komersial

· Google Play store menjadi salah satu tempat kami mengkomersialkan app ini



- · Penggunaan platform digital ini adalah dalam bentuk percuma
- Satu medium yang MUDAH & RINGKAS untuk digunakan.
- · Sesuai untuk semua peringkat umur.

Kegunaan

- · Rujukan figh dalam bentuk soft copy.
- Memaksimumkan penggunaan teknologi dalam kerja proses PdP
- Menjawab perosalan fiqh dalam kehidupan seharian



Novelty

- Rujukan dalam bentuk softcopy lebih efisien daripada hardcopy
- Menyemarakkan kepelbagaian sumber pendidikan dalam bentuk teknologi semasa.
- Kemudahan mengakses aplikasi ini (mesra pengguna).





"Technology will not replace great teachers, but in the hands of great teachers can be tranformational" - George Couros-



Aplikasi Mudah Tarawih

Muhammad Najmi Mohd Nazli Muhammad Aiman Azhar Muhammad Azmeer Shafiq Amiyamin bin Hj Mohamad Yusop Khalidah binti Kamaruzaman Nur Atasyha Ilyana Mohd Ismadi

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Abstrak

Aplikasi Mudah Tarawih direka dan dimuatkan ke Google Play Store secara percuma sebagai kegunaan guru, pelajar dan pengguna muslim secara umumnya bagi membaca dan merujuk panduan pelaksanaan solat sunat Tarawih dengan berkesan. Aplikasi ini dibina bertujuan sebagai panduan kepada warga Muslim untuk semua peringkat umur dalam menunaikan ibadat solat sunat Tarawih. Sebelum inovasi ini dicipta, pengguna akan merujuk kepada buku atau bahan PDF yang dibaca secara atas talian. Memandangkan zaman yang sudah berubah dan telefon pintar sudah menjadi alat utama dalam pelbagai sumber seharian, maka aplikasi ini diperlukan untuk sebaris dengan keperluan lain. Aplikasi ini boleh dimuaturun dan digunakan secara interaktif dan mudah, berbeza dengan buku serta bahan dalam paparan PDF. Inovasi ini dibangunkan dengan berpandukan kepada Model Penyelesaian Polya (1957). Kajian dijalankan secara kuantitatif dengan mengemukakan soal selidik terhadap beberapa orang responden kajian yang menggunakan aplikasi ini. Analisis kajian dijalankan dengan menggunakan model pengukuran Rasch untuk mengukur sumbangan penggunaan terhadap aplikasi ini. Hasil kajian menunjukkan penggunaan aplikasi solat Muslim ini membantu mereka dari segi penguasaan ilmu serta kaedah pengajaran dan pembelajaran panduan menunaikan solat sunat Tarawih. Pengguna biasanya menggunakan telefon pintar untuk melakukan semua perkara. Justeru, aplikasi ini boleh ditempatkan bersama apps yang lain untuk mudah digunakan. Aplikasi ini juga berupaya untuk beroperasi tanpa data internet semasa menggunakannya. Selain dari merealisasikan aspirasi Pendidikan Islam ke arah Revolusi Industri 4.0 dalam Pendidikan, ia juga dapat memperkasakan teknologi dalam Pendidikan Islam seiring dengan bidang-bidang yang lain. Produk ini telah dimuatturun dan digunakan oleh lebih daripada 1000 orang dalam pasaran terbuka. Inovasi ini juga merupakan satu projek Jabatan Pendidikan Islam IPGKBA bagi mewujudkan budaya wakaf ilmu dalam kalangan guru pelatih Pendidikan Islam. Akhirnya, dengan adanya inovasi Mudah Tarawih ini diharapkan dapat memberi manfaat dan memudahkan setiap individu khususnya kepada warga pendidik dari segi masa serta tenaga dalam mengajarkan panduan solat sunat Tarawih dengan berkesan.

Kata Kunci: Aplikasi , Mudah terawih, solat sunat Tarawih

Aplikasi Mudah Tarawih





MODEL PEMBENTUKAN PEMBELAJARAN BERMAKNA SECARA ATAS **TALIAN**

ABSTRAK

Pengajaran dan pembelajaran atas talian menjadi satu keutamaan bagi kelangsungan pendidikan semenjak berlakunya pandemic Covid-19. Namun begitu, komunikasi dan hubungan kemanusiaan yang terhad menjadi cabaran kepada para pendidik untuk mewujudkan pembelajaran yang bermakna untuk pelajar. Kejayaan pengajaran dan pembelajaran tidak sekadar diukur dari sudut pencapaian gred A atau lulus, tetapi juga setakat mana pelajar dapat menghayati dan mengamalkan ilmu, kemahiran dan nilai yang diperolehi dalam kehidupan harian mereka. Tujuan akhir setiap proses pendidikan ialah untuk melahirkan individu pelajar yang berilmu, berakhlak, berkemahiran dan berkesedaran untuk menyumbang kepada kebaikan dan kemajuan masyarakat dan negara. Justeru, para pendidik perlu berusaha memastikan wujudnya sesi pembelajaran bermakna untuk semua pelajar, meskipun hubungan guru dan pelajar terhad di atas talian. Kajian ke atas 121 orang pelajar mengenai faktor pembentukan pembelajaran bermakna mendapati empat faktor penting perlu diambil perhatian serius oleh para pendidik. Empat faktor tersebut ialah personaliti pensyarah, suasana pembelajaran, pengajaran berstruktur dan keterhubungan. Kajian ini mengetengahkan empat faktor ini dalam satu Model Pembelajaran Bermakna Peringkat IPT agar dapat menjadi panduan para pendidik mewujudkan pembelajaran bermakna yang dapat memberi kesan kepada kehidupan pelajar bukan sekadar dari sudut ilmu tetapi juga dari sudut nilai dan akhlak.

1.0 OBJEKTIF

Menjelaskan empat faktor utama pembentukan pembelajaran bermakna dari persepsi pelajar IPT.

2.0 KELEBIHAN

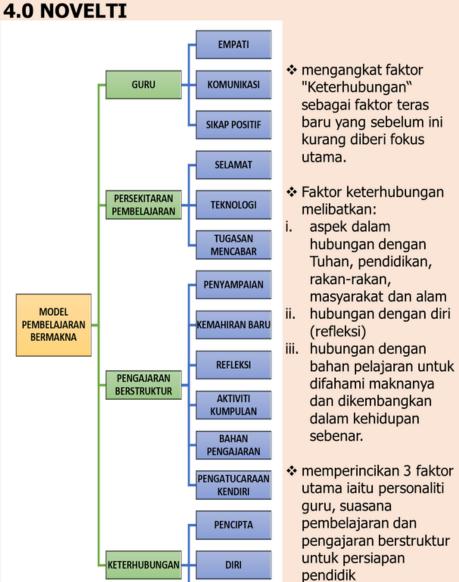
- ❖ Model ini boleh menjadi rujukan pantas pendidik dalam mereka bentuk pengajaran kerana mudah difahami dan dikaitkan dengan pengajaran dan pembelajaran yang efektif.
- Memberikan kepuasan kepada pendidik untuk merekabentuk pengajaran yang efektif dan yang mendorong pembelajaran bermakna.
- ❖ Memberikan garis panduan untuk pelajar untuk merealisasikan konsep "self-determined and directed learning" kerana pelajar diberi autonomi ke atas pembelajaran dengan dibimbing oleh pendidik.
- Sesuai dikembangkan bawah model penjajaran konstruktif yang dapat merangka objektif, aktiviti dan penilaian pembelajaran.

3.0 KEBOLEHGUNAAN

- Memberikan penekanan aspek nilai dan pembentukan sikap (afektif) seiring dengan aspek kefahaman (kognitif) dan kemahiran (psikomotor).
- Memberi peneguhan tentang aspek pengajaran pembelajaran yang mendokong kemenjadian insan seimbang dan sepadu.
- Memberi rujukan pantas untuk para pendidik merancang dan merekabentuk pengajaran berkesan yang dapat membantu pembelajaran bermakna.
- ❖ Boleh digunakan dalam dunia pendidikan, motivasi, pembangunan kendiri, kaunseling dan kekeluargaan.

6.0 PENCIPTA

- Noraishah P. Othman
- Mahfuzah Mohammed Zabidi
- ❖ Ahmad Rozaini Ali Hasan
- Norhapizah Mohd Burhan
- Ahmad Fakhrurrazi Mohammed Zabidi
- ❖ Siti Fairuz Sujak



5.0 POTENSI PENGKOMERSIALAN

❖ Berpotensi untuk ditampilkan dalam bentuk kit atau modul untuk kegunaan dan panduan para pendidik.

PEMBELAJARAN

- Berpotensi dikembangkan dalam bentuk jurnal pengajaran untuk rekod pendidik.
- ❖ Berpotensi diolah untuk dijadikan jurnal refleksi pembelajaran untuk para pelajar

Kit Bundar Lin's Cute Bug

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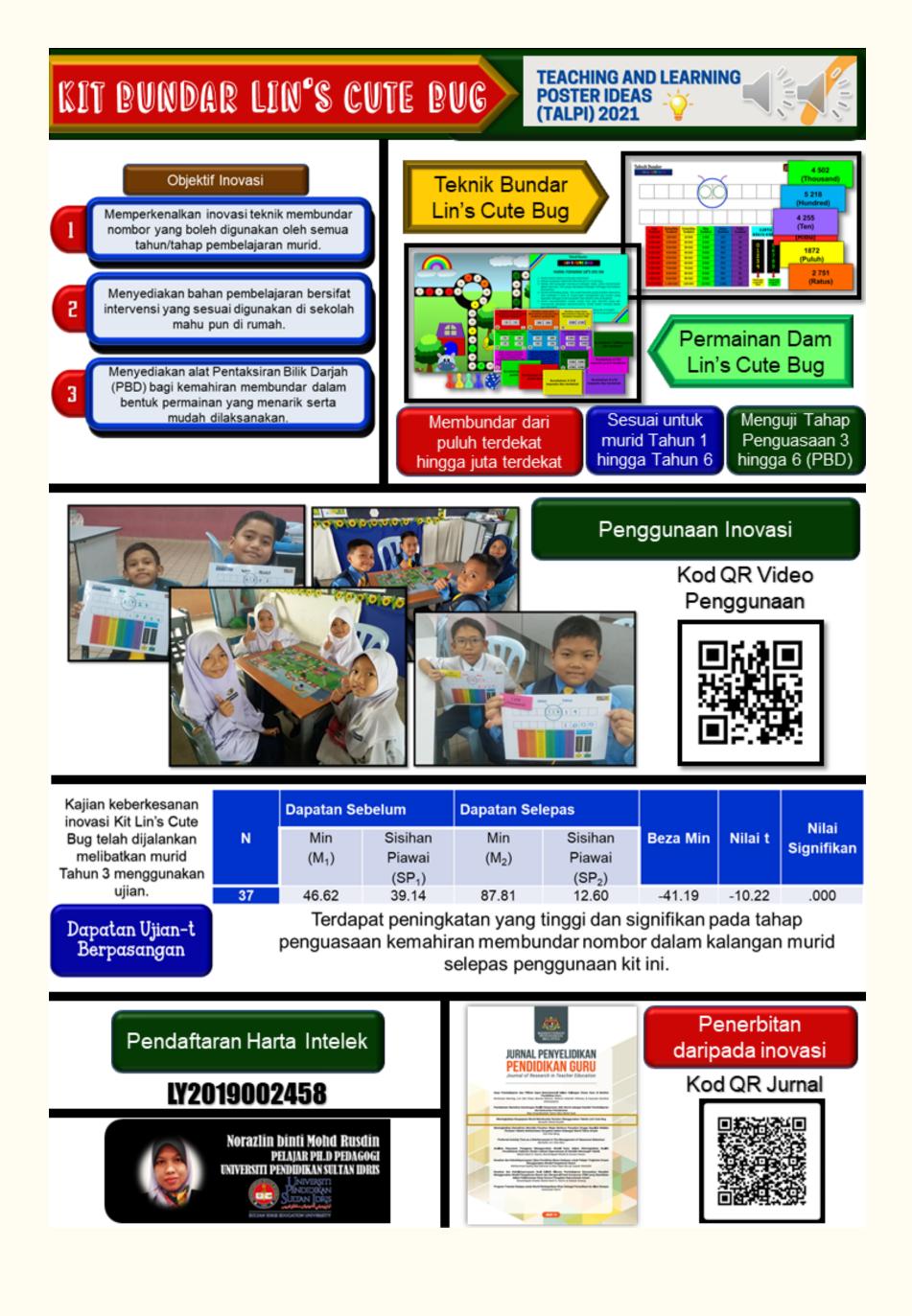
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Abstrak

Kemahiran membundar nombor perlu diajar dan dikuasai oleh murid seawal Tahun Satu lagi. Membundar nombor merupakan salah satu daripada standard kandungan bagi tajuk Nombor Bulat dalam silibus matematik sekolah rendah. Namun begitu, ramai murid menghadapi kesukaran dalam memahami dan menguasai konsep bundar dan ini akan menyebabkan mereka gagal mencapai Tahap Penguasaan 3 dalam Pentaksiran Bilik Darjah (PBD). Kit Lin's Cute Bug diperkenalkan bagi membantu murid belajar membundar secara berkesan dengan penegasan pada konsep yang tepat. Kajian kebolehgunaan kit ini melibatkan 32 orang murid Tahun Tiga di sekolah rendah. Dapatan analisis kajian eksperimen satu kumpulan menunjukkan peningkatan dari aspek penguasaan murid membundar nombor kepada puluh, ratus dan ribu terdekat selepas penggunaan kit ini berbanding sebelumnya. Responden kajian bukan sahaja menunjukkan keupayaan menjawab soalan-soalan berkaitan pembundaran nombor pada Tahap Penguasaan 3 bahkan mampu menyelesaikan masalah pada Tahap Penguasaan 4, Tahap Penguasaan 5 dan Tahap Penguasaan 6 yang turut melibatkan Kemahiran Berfikir Tahap Tinggi (KBAT).

Kata Kunci: Kit Lin's Cute Bug, Membundar nombor, Tahap Penguasaan 3

Kit Bundar Lin's Cute Bug



Dadu Bimate (APA)

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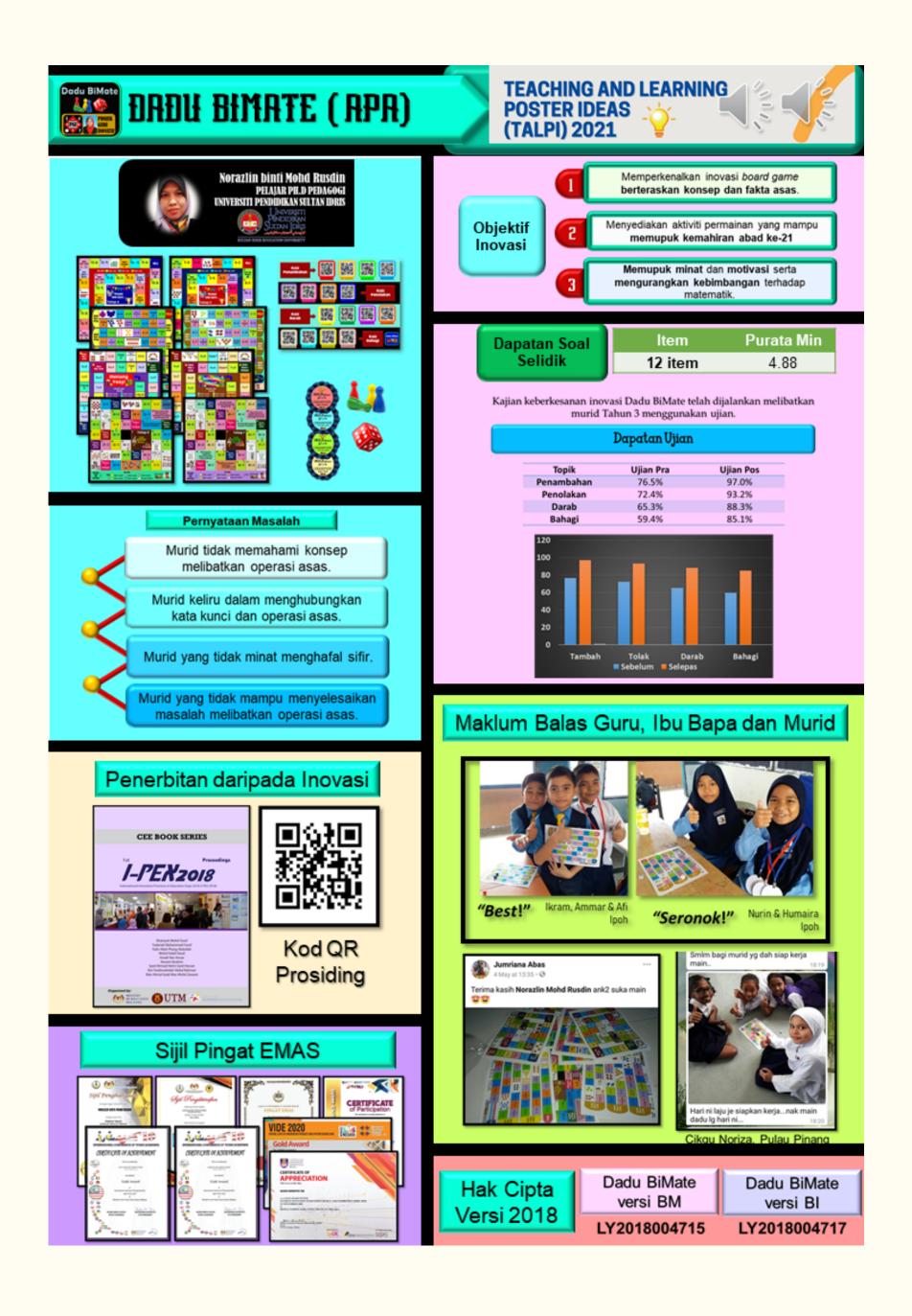
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Abstrak

Penguasaan konsep dan fakta asas bagi operasi penambahan, penolakan, pendaraban dan pembahagian dalam kalangan murid adalah penting. Penguasaan keempat-empat operasi asas dengan baik membolehkan murid memahami ayat Matematik dengan lebih mendalam dan menjadikan mereka penyelesai masalah yang bagus. Dadu BiMate (APA) merupakan inovasi permainan papan yang dihasilkan untuk membantu meningkatkan tahap penguasaan dan minat murid terhadap pembelajaran fakta asas matematik. Kajian keberkesanan inovasi ini telah dijalankan melibatkan 80 orang murid Tahun Tiga. Dapatan ujian pos menunjukkan peningkatan pada tahap penguasaan murid bagi keempatempat operasi asas. Sementara itu, hasil soal selidik pula mendapati para responden bersetuju bahawa inovasi ini telah meningkatkan minat dan motivasi mereka dalam pembelajaran operasi asas. Berdasarkan keberkesanan inovasi ini, disarankan agar penggunaannya dapat diperluaskan ke lebih banyak sekolah di seluruh Malaysia.

Kata Kunci: Dadu Bimate (APA) permainan papan, Matematik

Dadu Bimate (APA)



Vocabulary Game: Items in a House

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Abstract

In the early stages of literacy development, many children acquire language through constant exposure to the target language, whether speaking, listening, reading, or even writing. A child can be exposed to language by involving them in various activities in their daily routines. However, children may have difficulty following through with an activity that is monotone in nature. Thus, it is crucial to regularly incorporate use of language with play to create a meaningful and fun experience for children to learn the language. The 'Vocabulary Game: Items in a house' is an interactive yet straightforward digital game that children can use to increase their vocabulary whether they play it by themselves or with accompanying adults. The interface is simple for young children to understand and can be played anywhere.

Keywords: Vocabulary Game: Items in a house', language, digital game, children

Vocabulary Game: Items in a House



Create-Emo: Promoting Emotional Intelligence (EI) Through Creative Process (CP)

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Abstract

Create-EMO is a module that aims to enhance student's emotional intelligence (EI) through creative process (CP) in the teaching and learning of Malay literature component known as KOMSAS (Komponen Sastera). In order to build a better future generation, the Malaysian Ministry of Education (MOE) currently encourages educators to incorporate these values into the teaching process. This is also in line with the 21st Century Learning Skills where Communication, Collaboration, Critical Thinking, Creativity and Innovative skills, along with values and ethics will be the main focus in education. This module was designed and developed based on the ASSURE Model, an instructional system that teachers can use to develop lesson which integrate the use of technology and media. Goleman's four main EI domains - self awareness, self-management, social awareness and social skills; and Wallas' four-stage of creative process - preparation, incubation, illumination and verification, were also included in this module. The combination of the instructional system, the EI domains and stages of creative processes are hoped to provide students with an opportunity to work collaboratively in their KOMSAS Drama project. It is hoped that students are able to view problems and issues from varying perspectives while completing the drama project and find solution to their problems in the best possible manner

Keywords: Create-EMO, ASSURE Model, Malay literature

Create-Emo: Promoting Emotional Intelligence (EI) Through Creative Process (CP)



Domestic Safety Digital Learning for Pre-School (eSafety)

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Abstrak

Kemalangan di rumah dalam kalangan kanak-kanak yang berusia enam tahun ke bawah sering berlaku sama ada disebabkan kecuaian ibu bapa mahu pun kanak-kanak itu sendiri. Kajian ini bertujuan membantu mengurangkan kemalangan di rumah disebabkan kurangnya tentang pengetahuan tentang risiko alatan sekitar rumah. Satu permainan digital berasaskan teori konstruktivisme (eSafety) telah dibina untuk kegunaan murid-murid prasekolah. Gabungan antara word sall, quiz, digital scrambel dibangun dan disusun sebagai aktiviti pembelajaran. Proses pembinaan aplikasi ini merupakan manifestasi guru sebagai perancang dan pembangun kurikulum peringkat sekolah. Kajian mixed method ini melibatkan 25 murid prasekolah dan 10 pakar yang di temu bual di mana analisis bertema telah digunakan untuk mendapatkan maklumat balas tentang reka bentuk dan keboleh gunaan aplikasi. Pengajaran melalui Digital Game-Based Learning untuk topik keselamatan domestik bagi murid prasekolah dibina menggunakan perisian Microsoft Power Point Office 2019. Alat interaktif ini dibangunkan berdasarkan teori konstruktivisme, Constructive Alignment Model dan ASSURE Model. Dapatan kajian menunjukkan nilai persetujuan antara pakar bagi aplikasi ini adalah pada tahap sederhana. Didapati bahawa skor kebolehpercayaan untuk aplikasi Digital Game-Based Learning adalah 0.725.

Kata Kunci: keselamatan domestik, kanak-kanak prasekolah, persekitaran, permainan interaktif, Digital game-based learning

Domestic Safety Digital Learning for Pre-School (eSafety)

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021 eSafety— TALPI39A



ABSTRACT

Kemalangan di rumah dalam kalangan kanak-kanak yang berusia enam tahun ke bawah sering berlaku sama ada disebabkan kecuaian ibu bapa mahu pun kanak-kanak itu sendiri disebabkan kurangnya pengetahuan tentang risiko alatan sekitar rumah. eSafety (Digital Game-based Learning Of Domestic For Pre-school) dibangunkan berdasarkan teori konstruktivisme, Constructive Alignment Model dan ASSURE Model. Pembelajaran dalam format Digital Game-Based Learning untuk topik keselamatan domestik bagi murid prasekolah dibina menggunakan perisian Microsoft Power Point Office 2019 dan Wordwall dilengkapi aktiviti pembelajaran dan penilaian. Proses pembinaan aplikasi ini merupakan manifestasi guru sebagai perancang dan pembangun kurikulum peringkat sekolah. Bagi mendapatkan kebolehgunaan dan kebolehpercayaan alat ini 10 pakar telah menilai eSafety dengan nilai persetujuan 0.725. Alat pembelajaran interaktif ini berupaya menarik minat murid dan menunjukkan pencapaian yang sangat memberangsangkan apabila diuji kepada 25 orang murid prasekolah berbanding kaedah tradisional. Impak kepada guru pula dari sudut anjakan paradigma guru dan kreativiti untuk menghasilkan inovasi dalam proses penyampaian ilmu supaya ilmu dapat disampaikan dalam apa jua keadaan kepada murid-murid terutama ketika era pandemik COVID-19.

1.0 OBJECTIVES

- 1. Meningkatkan kesedaran tentang keselamatan diri di rumah dalam kanak-kanak prasekolah
- 2. Mengurangkan risiko kemalangan di rumah dalam kanak-kanak prasekolah
- 3. Meningkatkan pembelajaran secara kendiri.





2.0 ADVANTAGES

- 1.Mesra pengguna
- 2. Memotivasi murid untuk belajar secara kendiri
- 3. Aktiviti permainan interaktif yang menarik
- 4.Memberi kebebasan kepada murid untuk belajar
- 5.Meningkatkan kefahaman murid melalui aktiviti permainan dan penilaian

4.0 NOVELTY

Penerangan Produk:

-Inovasi ini sepenuhnya merupakan aplikasi digital interaktif pembelajaran berasaskan permainan

- Wordwall merupakan medium interaktif yang menguji kefahaman murid melalui kuiz di dalam Gameshow .

-Inovasi ini mempunyai 4 aktiviti pembelajaran yang dimulai dengan mengenal benda berbahaya di rumah diikuti mencari benda tersembunyi, memilih benda berbahaya, mengenal pasti kecederaan berdasarkan gambar.

Kumpulan sasaran:

Murid-murid prasekolah yang berumur 5-6 tahun.

Impak inovasi terhadap kumpulan sasar:

Membina keyakinan diri untuk pembelajaran kendiri Menarik minat murid untuk belajar sambil bermain

Murid dapat mengenali dan meningkatkan kefahaman tentang peralatan berbahaya

Kos pelaksanaan projek:

Inovasi ini tidak melibatkan kos pembelian bahan kerana menggunakan sepenuhnya secara digital.









Digital Mathematics for Pre-School (DigiMaps)

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Abstrak

Penguasaan matematik kanak-kanak prasekolah dipengaruhi oleh minat dan kefahaman mereka. Proses pembelajaran matematik awal menggunakan pembelajaran digital amat kurang dilaksanakan dikelas kelas prasekolah. Tujuan kajian ini adalah untuk meneroka pengalaman kanak-kanak prasekolah dengan memanfaatkan alat pembelajaran DiGiMaps. Dengan menggunakan kerangka penyelidikan kualitatif Phenomenology, pendekatan penerokaan dengan mendokumentasikan, menerangkan dan menganalisis data yang dikumpulkan menggunakan temubual separa berstruktur, pemerhatian, ditambah pengambilan nota, rakaman video menggunakan DiGiMaps kepada 25 orang kanak-kanak dengan menggunakan Video Stimulated Recalled Interview. Temu bual dirakam, ditranskrip, dan dianalisis secara tematik. Alat Pembelajaran DigiMaps yang digunakan dibangunkan menggunakan perisian Microsoft Power Point Office 2019 manakala aktiviti pembelajaran dibangunkan menggunakan aplikasi Wordwall, Powtoon dan Liveworksheet. Kandungan pembelajaran Alat pembelajaran DigiMaps ini juga dibangunkan berdasarkan Teori multiple Inttelligent, dan Teori Konstruktivisme untuk membantu kanak-kanak prasekolah bagi memudahkan kefahaman mereka belajar tentang matematik awal. Keseluruhan rekabentuk Alat Pembelajaran DigiMaps ini telah dibangunkan dengan menggunakan model ASSURE dan Constructive Allignment Model. 10 orang yang telah dilantik adalah untuk menilai rekabentuk dan kurikulum kesesuaian alat pembelajaran ini kepada kanak-kanak. Didapati bahawa skor kebolehpercayaan untuk aplikasi DigiMaPs adalah 0.800.

Kata Kunci: Pembelajaran Digital, Matematik Awal, kualitatif Phenomenolog

Digital Mathematics for Pre-School (DigiMaps)



Digital Case-Based Learning of Ecosystems (DECO) to Foster Environmental Awareness

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Abstract

Inculcating awareness in preserving and protecting the environment among citizens is crucial. Thus, effort of doing so is to be carried out especially among young generations. Digital Case-based Learning of Ecosystem (DEco) is an interactive tool, designed mainly to help students to better understand the topic of ecosystem and more importantly to instill environmental awareness amongst form 2 students. This application is developed based on case-based learning, by introducing cases as a problem to be clarified and addressed through a sequence of investigation tasks. DEco is also equipped with Web 2.0 tools to enhance students' engagement throughout the learning session. Seven experts in science subject and in Information and Communication Technology (ICT) with more than ten years of experience, were appointed to evaluate this interactive application. An Intra-class Correlation Coefficient (ICC) was used, to estimate expert's agreement on this interactive tool. The finding revealed a value for average measure was .992, that was a high degree of expert's evaluation consensus for Digital Case-based Learning of Ecosystem (DEco) in terms of its design and curriculum.

Keywords: Digital Case-based Learning of Ecosystem (DEco), interactive tool, Web 2.0 tools

Digital Case-Based Learning of Ecosystems (DECO) to Foster Environmental Awareness



e-MODUL STEM NU-TECH

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Abstrak

e-Modul STEM Nu-Tech merupakan modul yang dibangunkan untuk kegunaan pelajar melalui pembelajaran secara kendiri. Pembangunan modul ini adalah berdasarkan pandangan daripada guru-guru Sains tingkatan empat.Nu-Tech bermaksud 'Nuclear Technology' berkisar tentang pendidikan tenaga nuklear selari dengan standard kandungan dalam Dokumen Standard Kurikulum dan Pentaksiran (DSKP) Sains tingkatan empat.Pendidikan tenaga nuklear juga merupakan salah satu cabang pembelajaran yang terdapat dalam pendidikan STEM. Pendekatan pembelajaran secara inkuiri dan pembelajaran berasaskan masalah diperkenalkan apabila pelajar perlu mencari maklumat di internet, membuat poster dan menganalisis video. Penggunaan modul membolehkan peningkatan kemahiran berfikir, menguasai konteks kandungan yang kompleks dan akhirnya meningkatkan kualiti keberhasilan pelajar. Teknik – teknik pembelajaran yang aktif dan efektif bukan sahaja boleh memberi kesan terhadap tahap penguasaan pelajar, malah membantu guru supaya lebih berkompetensi dalam bilik darjah.

Kata Kunci: e-Modul STEM Nu-Tech , 'Nuclear Technology', pembelajaran

e-MODUL STEM NU-TECH

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



ABSTRACT

e-Modul STEM Nu-Tech merupakan modul yang dibangunkan untuk kegunaan pelajar melalui pembelajaran secara kendiri. Pembangunan modul ini adalah berdasarkan pandangan daripada guru-guru Sains tingkatan empat. Nu-Tech bermaksud 'Nuclear Technology' berkisar tentang pendidikan tenaga nuklear selari dengan standard kandungan dalam Dokumen Standard Kurikulum dan Pentaksiran (DSKP) Sains tingkatan empat. Pendidikan tenaga nuklear juga merupakan salah satu cabang pembelajaran yang terdapat dalam pendidikan STEM. Pendekatan pembelajaran secara inkuiri dan pembelajaran berasaskan masalah diperkenalkan apabila pelajar perlu mencari maklumat di internet, membuat poster dan menganalisis video. Penggunaan modul membolehkan peningkatan kemahiran berfikir, menguasai konteks kandungan yang kompleks dan akhirnya meningkatkan kualiti keberhasilan pelajar. Teknik – teknik pembelajaran yang aktif dan efektif bukan sahaja boleh memberi kesan terhadap tahap penguasaan pelajar, malah membantu guru supaya lebih berkompetensi dalam bilik darjah.

1.0 OBJECTIVES

- Membangunkan e-Modul STEM Tenaga Nuklear untuk kegunaan pelajar - pelajar yang mengambil mata pelajaran Sains tingkatan empat.
- Meningkatkan tahap penguasaan pelajar melalui pembelajaran menggunakan modul.
 Memperkasakan pembelajaran kendiri

pelajar

2.0 ADVANTAGES

Penggunaan modul menjadi satu cara untuk mengatasi perbezaan dari segi minat, latar belakang dan gaya belajar. Masalah pelajar hilang tumpuan dan tidak meminati mata pelajaran juga boleh diatasi. Pendekatan penggunaan modul ini adalah pilihan terbaik bagi mengatasi sistem pengajaran dan pembelajaran berpusatkan pelajar. Modul ini direka dan disusun secara terancang dan tersusun mengikut

Modul ini direka dan disusun secara terancang dan tersusun mengikut kurikulum baharu KSSM. Sikap pembelajaran secara kendiri dipraktikkan bagi memandu pelajar untuk meningkatkan kefahaman dan pengetahuan tentang tenaga nuklear.

3.0 USEFULNESS

Modul pembelajaran STEM Nu-Tech memenuhi keperluan pedagogi sebagaimana yang disyorkan oleh KPM. Guru boleh menggunakan modul ini sebagai panduan untuk meningkatkan lagi kualiti pengajaran dan pembelajaran. Penggunaan modul sebagai sokongan kepada guru semasa merancang aktiviti pengajaran dan pembelajaran kepada pelajar.Penggunaan modul kepada pelajar membantu meningkatkan kemahiran berfikir aras tinggi dengan pendekatan pembelajaran yang praktikal dan isi kandungan yang relevan dengan kehidupan seharian. Modul ini memfokuskan kepada perkembangan berfikir secara kritis dan kreatif.

4.0 NOVELTY

E-Modul adalah hasil pembangunan berdasarkan konsensus pakar.Seramai 10 orang pakar dipilih daripada pelbagai bidang kepakaran iaitu Agensi Nuklear Malaysia, Pusat STEM Negara, Pusat Sains Negara dan Guru Cemerlang Sains.

Kandungan e-modul ini selari dengan kehendak standard kandungan yang terdapat dalam Dokumen Standard Kurikulum dan Pentaksiran (KSSM) Sains tingkatan empat.

Modul pembelajaran ini merupakan karya asli,dibangunkan setelah mendapati tiada modul yang bersesuaian untuk kegunaan pelajar tingkatan empat yang menggunakan sistem kurikulum baharu Kurikulum Standard Sekolah Menengah (KSSM).

5.0 COMMERCIALISATION POTENTIAL

Modul ini merupakan sokongan kepada pembelajaran sedia ada pelajar menggunakan buku teks. Ia mengandungi strategi pembelajaran berasaskan inkuiri dan pembelajaran berasaskan masalah bagi memenuhi pembelajaran abad ke -21 pelajar dan sesuai digunakan samada dalam PdPC atau pun PdPR.

6.0 INVENTORS

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Smart Al-Quran Memorization

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Abstract

The Smart Al-Quran Memorization (SmART Al-Q) application is a multimedia application using Adobe Flash CS6 with ActionScript 3.0. This SmART Al-Q app was built based on the ADDIE model to enhance the method of teaching & learning of al-Quran subject in Tahfiz Model Ulul Albab School Curriculum, based on the theoretical teaching and learning of al-Qabisi (1955) who is one of the prominent Islamic scholars. Basically, this application integrates the conventional method of memorization into a technological method of memorization by using the digital mushaf. This learning concept is focusing on the concept of learning Al-Quran using senses such as listening, scanning, and reading. The prototype of this app is protected by the copyright from Intellectual Property Corporation of Malaysia (MyIPO).

Keywords: Smart Al -Quran, application, memorization, digital mushaf

Smart Al- Quran Memorization







SmART Al-Quran Memorization

Ismail Salleh Al-Hafiz, Prof. Madya Dr. Mohamad Khairi Othman, Prof. Madya Dr. Mardzelah Bt Makhsin, Mohd Zulhilmi Haron, Mohamad Syarul Azwan bin Mohd Isa

ABSTRACT

The Smart Al-Quran Memorization (SmART Al-Q) application is a multimedia application using Adobe Flash CS6 with ActionScript 3.0. This SmART Al-Q app was built based on the ADDIE model to enhance the method of teaching & learning hifz al-Quran based on the theoretical teaching of al-Qabisi (1955) who is one of the islamic scholars who emphasizes the method of learning memorization using the senses such as Visual(scanning), auditory (listening) and khenestatic(reading). Basically, this app is focusing on the concept of learning Hifz al-Quran using senses such as listening, scanning and reading. The development of this app is in line with the 4.0 Industrial Revolution.

OBJECTIVES

- ✓ Enhance the method of teaching & learning memorize of al-Quran from traditional method by using mushaf to technology method by using digital mushaf for students and the public.
- ✓ Help teachers stimulate new skills and method of Tahfiz teaching and learning.
- ✓ Apply this essential tahfiz learning tool as life-long learning

USEFULNESS

- ✓ To improve the learning method of students memorizing the Quran from the traditional method by using the method of mushaf to technology by using digital mushaf for students and the public.
- ✓ To help teachers stimulate new skills and method of Tahfiz teaching and learning.
- ✓ Apply this essential tahfiz learning tool as life-long learning

ADVANTAGES

- ✓ Have a repeat of each sentence and the repeat of each group of sentences.
- ✓ This app is more to memorization instead of others al-Quran apps is more to reciatition.
- √This memorization application contains recording features to help the memorization process.

NOVELTY

- ✓ The content of this app had gone through content validity and reliability by Syeikh Kadri Abdul Hamid who is the expert scholar in tahfiz learning from Darul Aman Institute of Al-Quran(IQDAR).
- ✓ Apart from that, he is also one of the judges in The National Quranic Memorization Competition. The SmART Al-Q application was tested amongst 10 students who are undergoing tahfiz learning in SMK Agama Kedah, Alor Setar, Kedah Darul Aman and 7 expert teachers.
- ✓ This app was protected for copyright from Intellectual Property Corporation of Malaysia (MyIPO) with application number LY2019001911

COMMERCIALISATION POTENTIAL

- ✓ For educational programs at higher learning institutions.
- ✓ For novice tahfiz teachers and beginners in tahfiz learning.
- For administrators and educators of educational program.

PRODUCT PICTURE/RECOGNITION



☐ MyRIS BEST INVENTION AWARD 2019☐☐GOLD AWARD INTERNATIONAL EUREKA

A.O.T.L Guide: The Asynchronous Online Teaching & Learning Guideline

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Abstract

The use of online platforms as a teaching and learning (T&L) delivery method is prevalent, especially during this Covid-19 pandemic. There are two types of approaches in delivering online T&L: synchronous and asynchronous. The synchronous approach is almost similar to the face-to-face T&L approach where a teacher/lecturer and students meet in a live platform such as Google Meet at the scheduled time. Unfortunately, the situation requiring T&L to be conducted 100% on live meeting, causing problems such as students' affordability to acquire a large Internet data quota for the purpose of having smooth synchronous class as it requires a large amount of Internet data. Asynchronous approach on the other hand could help to address this problem. In addition, this approach allows students to choose their learning time that is most convenient to them without relying on live T&L sessions. However, to ensure the asynchronous approach meets the T&L objectives, guidelines are needed. A.O.T.L Guide is the guidelines for conducting asynchronous online T& L. It guides teachers/lecturers in planning content materials, delivering them to the students, and subsequently monitoring students' understanding of the topic. A survey result shows many students give positive feedback towards having asynchronous online delivery of T&L based on the A.O.T.L Guide.

Keywords: A.O.T.L Guide, asynchronous, teaching and learning (T&L), students

A.O.T.L Guide: The Asynchronous Online Teaching & Learning Guideline





A.O.T.L GUIDE: THE ASYNCHRONOUS ONLINE TEACHING & LEARNING GUIDELINE

ABSTRACT

The use of online platforms as a teaching and learning (T&L) delivery method is prevalent, especially during this covid-19 pandemic. There are two types of approaches in delivering online T&L: synchronous and asynchronous. The synchronous approach is almost similar to the face-to-face T&L approach where a teacher/lecturer and students meet in a live platform such as Google Meet at the scheduled time. Unfortunately, the situation requiring T&L to be conducted 100% on live meeting causes problems such as students' affordability to acquire large internet data quotas for the purpose of having smooth synchronous class as it requires large amount of internet data. Asynchronous approach on the other hand could help to cater this problem. In addition, this approach allows students to choose their learning time that is most convenient to them without relying on the live session of T&L activities. However, to ensure the asynchronous approach meet the T&L objectives, guidelines are needed. A.O.T.L Guide is the guidelines for conducting asynchronous online T&L. It guides teachers/lecturers on planning content materials, delivering them to the students, and subsequently monitoring students' understanding of the topic. A survey result shows many students give positive feedback towards having asynchronous online delivery of T&L based on the A.O.T.L Guide.

1.0 OBJECTIVES

☐ To guide teachers/lecturers in managing the T&L asynchronous approach using easy-to-supervisetools that helps cater special need students as described in the previous section.

3.0 USEFULNESS

The A.O.T.L Guide is a systematic guideline that helps teachers/lecturers manage their T&L using asynchronous approach from preparing materials phase until monitoring students' performance using easy-to-supervise tools.

A.O.T.L Guide:

2.0 ADVANTAGES

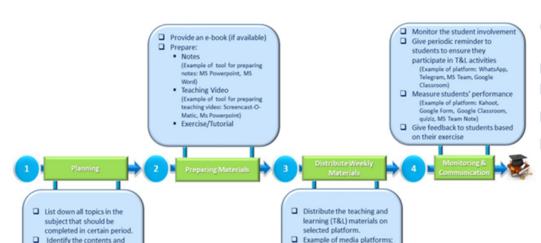
- □ Helps teachers/lecturers to plan their T&L systematically.
- ☐ Gives ideas on how to deliver the T&L contents using suitable tools.
- Helps teachers/lecturers to monitor students' performance using the asynchronous T&L approach.
 - Ensures the contents of T&L delivered to students successfully despite challenges faced by students such as insufficient data quota, slow internet access, and those who have to share gadgets with siblings.

5.0 COMMERCIALISATION **POTENTIAL**

A.O.T.L helps to guide teachers and lecturers who wants to implement asynchronous T&L approach especially those who is new in ODL teaching.

4.0 NOVELTY

□ A.O.T.L Guide is the first formal systematic guideline to help teachers/lecturers conduct their asynchronous T&L approach properly, including planning the T&L activities, preparing materials, distributing the materials, and monitoring students' performance.



ctivities that should be completed in a week Plan the medium to

Learning Managem
 System such as MS

Team, Google Classro

6.0 INVENTORS

- Nur Huda Jaafar Zuriati Ismail
- Mohd Hafizan Musa
- Suhanah Rosnan

'AREAL-VOCAB': An Augmented Reality Mobile Application for English Vocabulary Learning of Children with Autism Spectrum Disorder

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Abstract

American Psychiatric Association defined autism spectrum disorder as a neurological disorder in which diagnosed children may face difficulty in social communication or have a repeated or restricted set of behaviours. Learners with autism are mostly visual strategy learners and they tend to learn better through pictures and images. Due to their cognitive disabilities, most learners with autism struggle to acquire new vocabulary and with the existence of the Fourth Industrial Revolution, the use of technology is no longer a stranger to the education field. Hence, the use of augmented reality technology is considered in this study as past literature has proven that augmented reality technology could help to provide autism learners with a more meaningful learning session. In conjunction with this, this innovation is aimed at developing a mobile augmented reality application named 'AReal-Vocab' to help learners with autism, which will later be employed as an intervention to autism learners in their English vocabulary learning process. The developed mobile augmented reality application is employed with two autism learners aged 7 to 10 years old to discover their acceptance towards the developed mobile application. Based on the findings, it can be seen that AReal-Vocab application has given a significant impact on autism learners' language learning process. AReal-Vocab has helped autism learners to learn English vocabulary language learning process.

Keywords: A.O.T.L Guide, 'AReal-Vocab', mobile augmented reality application, English vocabulary

'AREAL-VOCAB': An Augmented Reality Mobile Application for English Vocabulary Learning of Children with **Autism Spectrum Disorder**

TEACHING AND LEARNING **POSTER IDEAS** (TALPI) 2021













ABSTRACT

American Psychiatric Association defined autism spectrum disorder as a neurological disorder due to which diagnosed child may face difficulty in social communication or have a repeated or restricted set of behaviours. Learners with autism are mostly visual strategy learners and they tend to learn better through pictures and images. Due to their cognitive disabilities, most learners with autism struggle to acquire new vocabulary and with the existence of fourth industrial revolution, the use of technology is no longer a stranger to the education field. Hence, the use of augmented reality technology is considered in this study as past literature has proven that augmented reality technology could help to provide autism learners with a more meaningful learning session. In conjunction to that, this innovation is aimed at developing a mobile augmented reality application named 'AReal-Vocab' to help learners with autism, which then later to be employed as an intervention to autism learners in their English vocabulary learning process. The developed mobile augmented reality application is employed to two autism learner aged 7 to 10 years old to discover their acceptance towards the developed mobile application. Based on the findings, it can be seen that AReal-Vocab application has given a significant impact on autism learners' language learning process. AReal-Vocab has helped autism learners to learn English vocabulary in a more interesting yet meaningful manner and at the same time spark their interest in their English vocabulary language learning process.

1.0 OBJECTIVES



To bridge the gaps between typically developed learners with autism learners

To provide autism learners with a more meaningful learning session

2.0 ADVANTAGES



- ^Autism learners can learn English vocabulary in a more interesting yet meaningful manner
- ^Sparks their interest in their English vocabulary language learning process ^Practical, cost-effective, user-friendly & transferable to other practitioners
- ^Can benefit learners with autism, teachers & parents with autism children

3.0 USEFULNESS

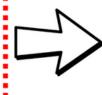




Convenient



User-friendly





Download

from App Store or Play Store



Launch App



Instructions To Use

Scan Flash Card

4.0 NOVELTY

1. Able to turn the traditional two-dimensional learning into a three-dimensional, interactive, and engaging learning experience

2. Enticing to a wide range of learners with different learning styles

3. It conveys a friendly message, and the way the character communicates through movement also conveys a straightforward message that is simple to understand

4. The 3D character has a distinct and vibrant appearance that will have a greater influence on the children towards understanding the meaning of the text





5.0 COMMERCIALISATION POTENTIAL





Autism children now can learn interactively, Teachers now have the teaching aids, Autism centres OR schools can help sourcing the app to the teachers Parents now can leisurely help their autistic children with their language learning journey

6.0 INVENTORS

Haida Umiera Hashim Assoc. Professor Dr. Melor Md Yunus Assoc. Professor Ts. Dr. Helmi Norman







Talk Like a Pro with a Pro

Muhammad Noor Abdul Aziz Nurahimah Mohd Yusoff Marcia Jane A/P Ganasan

Universiti Utara Malaysia, Kedah

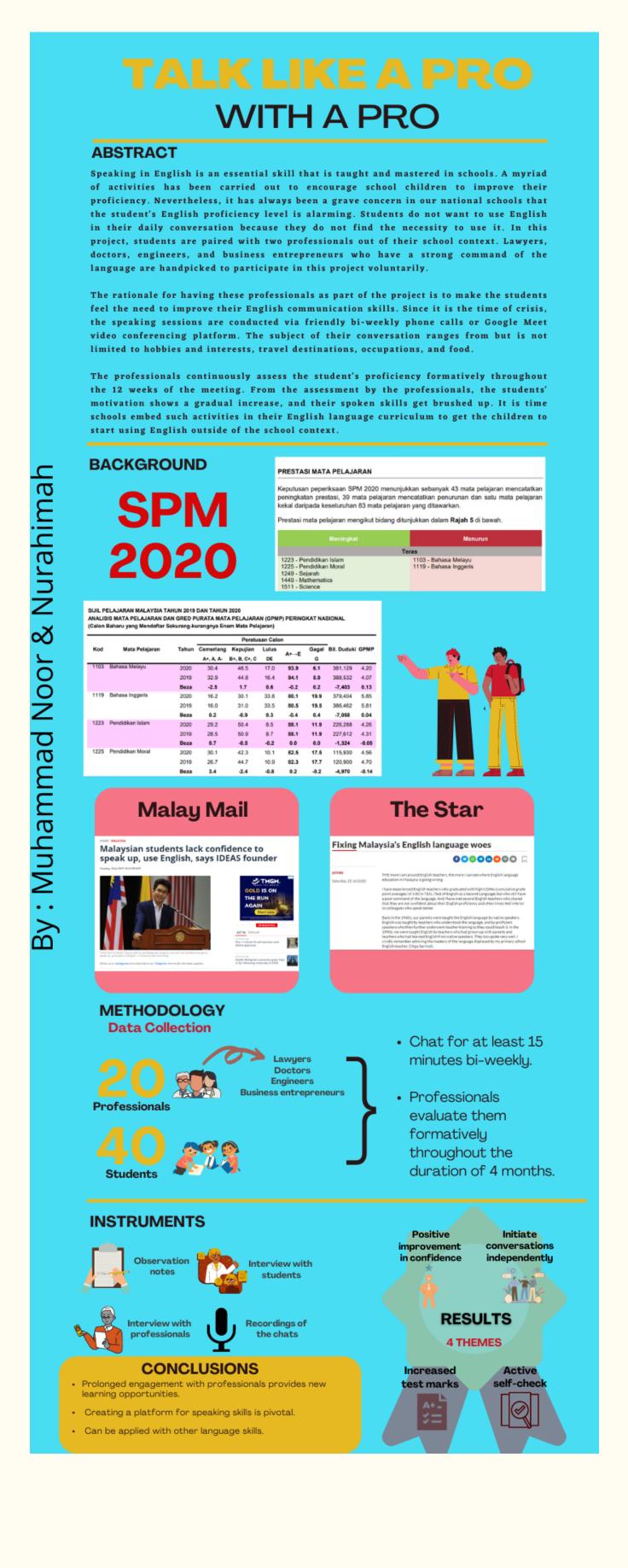
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Abstract

Speaking in English is an essential skill that is taught and mastered in schools. A myriad of activities has been carried out to encourage school children to improve their proficiency. Nevertheless, it has always been a grave concern in our national schools that the student's English proficiency level is alarming. Students do not want to use English in their daily conversation because they do not find the necessity to use it. In this project, students are paired with two professionals out of their school context. Lawyers, doctors, engineers, and business entrepreneurs who have a strong command of the language are handpicked to participate in this project voluntarily. The rationale for having these professional as part of the project is to make the students feel the need to improve their English communication skills. Since it is the time of crisis, the speaking sessions are conducted via friendly bi-weekly phone calls or Google Meet video conferencing platform. The subject of their conversation ranges from but is not limited to hobbies and interests, travel destinations, occupations, and food. The professionals continuously assessed the student's proficiency formatively throughout the 12 weeks of the meeting. From the assessment by the professionals, it is hoped that the students' motivation will show a gradual increase, and their spoken skills will be improved

Keywords: English speaking, students, motivation, proficiency

Talk Like a Pro with a Pro



Intelligent New Product Development (i-NPD) Board

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Abstract

Innovative and student-centered learning is encouraged and lauded upon in the 21st century classrooms. In this project, the New Product Development, which is a theory-based subtopic in several Marketing courses, is injected with innovative elements to increase students' attention and understanding. Prior to this, students often struggled in assimilating all the required information in the 8-step process of the New Product Development. The i-NPD Board serves as an intervention that is both innovative and interactive to guide and nurture students in understanding the New Product Development topic in new lights and perspectives.

Keywords: New Product Development, i-NPD Board, innovation, student-centered, 21st century classroom.

Intelligent New Product Development (i-NPD) Board



THE ELEMENTS OF ONLINE LEARNING TOWARDS STUDENTS' PARTICIPATION IN LEARNING ACTIVITIES

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Abstract

During the COVID-19 pandemic, online learning is crucial as it helps to reduce face to face communication during the learning process. The COVID-19 pandemic undoubtedly has renewed the application of online learning. However, discussion on the pivotal elements of the online learning towards students' participation in learning activities is still limited. This study was initiated to examine the relationship between the online learning elements towards students' participation in learning activities. The elements of online learning used in this study were adopted from Stansfield, McLellan, & Connolly (2004) framework and being used to determine the relationship between the elements and student participation in learning activities. This study used quantitative method as it was conducted by distributing questionnaire to 300 respondents of Faculty of Administrative Science and Policy Studies (FSPPP) in UiTM Seremban 3. This study has found that three variables which are contents of learning, flexibility of learning, and learner control have strong relationship towards students' participation in learning activities. From the findings, it is shown that student's participation in online learning activities is depending on the content that was provided to them, the platform used by the lecturers, and the engagement provided between the students and lecturers This research project has contributed to new knowledge for educational institutions especially universities to focus on the essential aspects that need to be addressed in dealing with online learning issues. This project has also provided insights on how to tackle the subject effectively by using the elements of online learning which can assist both students and lecturers to create a good online learning environment

Keywords: Faculty of Administrative Science and Policy Studies (FSPPP), students, online learning

THE ELEMENTS OF ONLINE LEARNING TOWARDS STUDENTS' PARTICIPATION IN LEARNING ACTIVITIES

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



TITLE:

THE ELEMENTS OF ONLINE LEARNING TOWARDS STUDENTS'
PARTICIPATION IN LEARNING ACTIVITIES

ABSTRACT

1.0 OBJECTIVES

This study is initiated the relationship examine between the elements of online towards learning students' participation learning in activities. The elements of online learning used in this study adopted from was Stansfield, McLellan, & Connolly (2004) framework which are consist of contents of learning, flexibility learning of and learner control and being used to determine the relationship of student the elements and participation learning in activities

2.0 ADVANTAGES

This project has also given in insight on how to tackle the subject effectively by using the elements of online learning which can assist both students of and lecturer to create a good online learning environment.

4.0 NOVELTY

This research project has contributed to new knowledge to educational institutions especially universities to focus on the essential aspects that need to be addressed in dealing with online learning issues

3.0 USEFULNESS

From the finding, its show student's participation in online learning activities is depending on the content that being create, the platform uses by the lecturer and the engagement provided between students and lecturer.

5.0 COMMERCIALISATION POTENTIAL

This framework can be applied by educators to create a good online learning environment and also encourage students participation.

e-Module: "MANDARIN IS FUN"

Lai See May
Azzieatul Syazwanie Azmi
Rohazlyn Rosly

Uiniversiti Teknologi MARA Kelantan Branch

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"MANDARIN IS FUN" is an electronic version of interactive Mandarin teaching and learning (T&L) aid developed by a group of dedicated lecturers from Akademi Pengajian Bahasa (APB) UiTM Cawangan Kelantan (UiTMCK). This module is especially designed for "Daily Mandarin Course" course organised by Pakej Kemahiran Bahasa APB UiTMCK which was first introduced in March 2020. Due to the COVID-19 pandemic and as face-to-face meeting is restricted, the module is now available in an electronic and online version to support the e-Learning and Open and Distance Learning (ODL) setting practiced by most of the education system in the global market including UiTMCK. The module was constructed based on six interesting themes: Introduction to Pinyin, Greetings, Numbering system, Hobby, My Family and Let's eat! These themes were chosen considering their practicality in the learners' everyday lives' affairs. Besides guiding the learners to be able to acquire basic Mandarin communication skills, this module will also expose its users to other important language skills namely listening, writing, and reading skills. Various interesting and fascinating practices, quizzes, and access links to various stimulating audio-visual resources are also included in the module to encourage its users to learn the language in a fun-loving way. Besides, learners are also encouraged to interact positively with their tutors in a stress-free setting to ensure the teaching and learning of this e-Module is more effective. The electronic version of "Mandarin is Fun" offers limitless flexibility and accessibility to the users as it can be obtained via the link given anytime and anywhere with the ample guidance from numerous well-trained tutors from APB UiTMCK.

Keywords: Teaching and Learning aid, e-learning, e-Module, Mandarin, language skills.

e-Module: "MANDARIN IS FUN"

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



INTRODUCTION: *e-Module: "MANDARIN IS FUN"* is an electronic version of interactive Mandarin teaching and learning (T&L) aid developed by lecturers from Akademi Pengajian Bahasa (APB) UiTM Cawangan Kelantan (UiTMCK). This module is specially designed for "Daily Mandarin Course" course organised by Pakej Kemahiran Bahasa APB UiTMCK which was first introduced in March 2020. Due to the COVID-19 pandemic and face-to-face meeting is restricted, the module is now available in electronic and online version to support the e-Learning and Open and Distance Learning (ODL) setting practiced by most of the education system in the global market including UiTMCK.

1.0 OBJECTIVES

- i. To introduce basic language skills to the Non-Mandarin speakers.
- ii. To expose the Non-Mandarin speakers to practice the skills learned via numerous practical settings.
- iii. To encourage positive interactions among the multiracial society in the country.

3.0 USEFULNESS

- i. 6 themes were chosen to be included in this module considering their practicality in the learners' everyday lives' affairs.
- ii. Lessons and skills acquired from this e-Module allow the users to implement them in their daily life.
- iii. This e-Module can be easily accessed anytime and anywhere as long as the users are equipped with an electronic device.

5.0 COMMERSIALIASATION POTENTIAL

This e-Module is planned to be offered to:

- i. The participants of *Pakej Khas Bahasa*, UiTMCK (students, school leavers and the public).
- ii. Participants from other universities (local and overseas) via the collaboration with various departments in UiTM (e.g.: BHEA, BHEP, BPJI Department of International Affairs (DIA) and etc.)

2.0 ADVANTAGES

The electronic version of "Mandarin is Fun" interactive T&L Module offers limitless flexibility and accessibility to the users as it can be obtained via the link given anytime, anywhere with the ample guidance from numerous well-trained tutors from APB UiTMCK.

4.0 NOVELTY

- i. Available in electronic version (flipbook)
- ii. 6 specially designed themes: Introduction to Pinyin, Greetings, Numbering system, Hobby, My Family and Let's eat! considering their practicality in the learners' everyday lives' affairs.
- iii. Covers all basic language skills: speaking, listening, writing and reading skills.
- iv. ALL in ONE: Notes, practices, revisions, quizzes and access links to various stimulating audio-visual resources are included in the module to encourage its users to learn the language in a fun-loving way.

6.0 INVENTORS

Lai See May

Rohazlyn Rosly

Azzieatul Syazwanie Azmi

A Systematic Functional Linguistics Writing Approach in an Online Mandarin as a Foreign Language Course

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Abstract

Guided writing instruction is a widely used scaffolding strategy. Nevertheless, most of the Mandarin as a Foreign Language (MFL) students have struggled with their guided writing essays. All the information in the guided writing essay is presented in the form of keywords. Initially, the students were still unsure what to write about using the keywords provided and they were unsure where to begin writing, especially in an online MFL course. This study aims to investigate the adapted Systemic Functional Linguistics (SFL) writing approach to guided writing instruction in an online MFL communicative course. Whiteboard fi is used as an online tool to guide the students throughout the writing process. The SFL writing approach includes three categories of language aspects relevant to meaningmaking that are organised step by step: ideational, interpersonal, and textual. A single group experimental design was used for the pre-test and post-test. This study includes twenty MFL students from a UNIMAS intermediate level MFL classroom in the first semester of the 2020/2021 academic year. The results of the pre-test and post-test have been analysed and three writing samples have been chosen for in-depth analysis. The quantitative results showed that the experimental group showed a significant and positive effect on their writing performance. The qualitative results revealed that there was a wide range of sentence patterns, grammar, and logical sequence of ideas in writing in the post-test when compared to the pre-test. The adapted SFL writing approach and the integration of Whiteboard.fi as an online tool are effective in improving students' writing competence and scaffolding their generation of writing ideas in an online MFL communicative course.

Keywords: Systemic Functional Linguistics writing approach, Mandarin as a Foreign Language, Whiteboard.fi, Communicative Language Teaching, Online Language Teaching

A Systematic Functional Linguistics Writing Approach in an Online Mandarin as a Foreign Language Course

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



ABSTRACT: A Systemic Functional Linguistics Writing Approach in Online Mandarin as a foreign language course

Guided writing instruction is a widely used scaffolding strategy. Nevertheless, most of the Mandarin as a Foreign Language (MFL) students struggled with their guided writing essays. All the information in the guided writing essay is presented in the form of keywords. They are still unsure what to write about using the keywords provided and they are unsure where to begin writing, especially in an online MFL course. This study aims to investigate the adapted Systemic Functional Linguistics (SFL) writing approach to guided writing instruction in an online MFL communicative course. Whiteboard fi was used as an online tool to guide the students through the writing process. The SFL writing approach included three categories of language aspects relevant to meaning-making that were organised step by step: ideational, interpersonal, and textual. A single group experimental design is used for the pre-test and post-test. This study included twenty MFL students from a UNIMAS intermediate level MFL classroom in the first semester of the 2020/2021 academic year. The results of the pre-test and post-test have been analysed and three writing samples have been chosen for in-depth analysis. The quantitative results showed that the experimental group had a significant and positive effect on writing performance. The qualitative results revealed that there was a wide range of sentence patterns, grammar and the logical sequence of ideas in writing in the post-test when compared to the pre-test. The adapted SFL writing approach and the integration of Whiteboard.fi as an online tool is effective in improving students' writing competence and scaffolding their generation of writing ideas in an online MFL communicative course.

Keywords: Systemic Functional Linguistics writing approach, Mandarin as a Foreign Language, Whiteboard.fi, Communicative Language Teaching, Online Language Teaching

1.0 OBJECTIVE

To investigate the adapted Systemic Functional Linguistics (SFL) writing approach to guided writing instruction in an online MFL communicative course. Whiteboard.fi was used as an online tool to guide the students through the writing process.

2.0 ADVANTAGES

The adapted SFL writing approach: •It is a template/guideline for those who require assistance in getting started with their writing. •Students can do self-learning with the help of more clear guidelines. The writing process promotes 21st-century skills such as critical thinking and

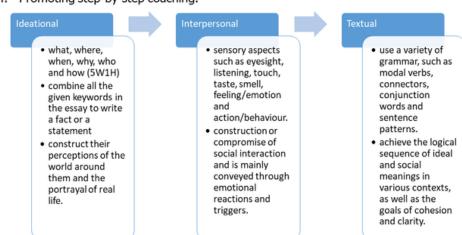
•It is a free and simple online tool that can be used by both instructors and students. •It enables the instructor to see the students' responses instantly and provide immediate feedback to improve students' writing skills and scaffolding their idea generation Students can see examples of other understand.

Students can also write on the whiteboard if they do not know how to type Chinese •Emojis can be used by both teachers and

students in Whiteboard. fi to create a more enjoyable learning environment.

4.0 NOVELTY

- This writing approach was adapted from Systemic Functional Linguistics (SFL) writing approach.
- The approach has been redesigned with more guidelines in an online MFL communicative course. During the writing process, Whiteboard.fi was integrated.
- Four distinguishing features:
- 1. Learning to write while applying all the details in our real life context.
- 2. Including writing as a phase as well as an outcome.
- 3. Putting a premium on learning interactions. 4. Promoting step-by-step coaching.



3.0 USEFULNESS

Quantitative results

	Min.	Max.	Mean	Std. Deviation
Pre-test (traditional writing approach)	3.5	7.0	5.50	0.95
Post-test (adapted SFL writing approach)	4.5	7.5	6.28	0.95

Wilcoxon Signed-Rank Test:

- Z-value result:
- > The value of z is-2.4303. The p-value is .0151. > The result is significant at p < .05.
- The Wilcoxon Signed-Rank Test was determined that the adapted SFL writing approach had a statistically significant

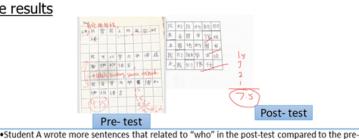
Sample Size (N)

impact on writing performance.

Significance Level	.05	
Hypothesis	Two-tailed	
Mean Difference	-0.62	
Sum of pos. ranks	21	
Sum of neg. ranks	115	
Z-value	-2.4303	
Ties	5	
p-value	.0151	
Median	0.5	

20

Qualitative results



•For example, she only used "我" (I) in the pre-test, but she used "我和我的新朋友" (my new friend and I), "戏五" (a name, "Xi Wu") and "我们"(we) in post-test.

 Student A wrote elaboration which can be related to her emotional reactions and triggers. •For example,我们很忙。 (We are busy)

Compare to the pre-test, student A was able to form more sentence patterns and she can arrange it according to the "Ideational" and "Interpersonal" sequences: "去图书馆" (go library)→ "带他的图书" (bring books)→ "做毕业论文" (do graduation thesis)→ "很忙" (busy)

5.0 COMMERCIALISATION POTENTIAL

Create a template for the adapted SFL writing approach for the communicative course and commercialise it as a writing course.

6.0 INVENTOR



Mdm. Kuan Wee Ling

Senior Language teacher

Faculty of Language and Communication

Universiti Malaysia Sarawak (UNIMAS)

Empowering Students Digital Content Creation Using Flipbook as an Alternative Assessment Through Plan-Design-Share Strategy

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Abstract

In the first quarter of 2020, Covid-19 was traced, and this led to a huge disruption in teaching and learning in all educational institutions, namely schools and universities all around the world. Malaysia was not spared from this and was also heavily affected by this pandemic. With the closure of universities in early April 2020, it was inevitably imminent that the delivery and assessment of our course must also be revised and reformed. Traditionally, assessment was conducted face-to-face. However, when learning is delivered via remote learning, alternative assessment must be considered to assess the same learning outcomes in a different mode. In such a situation, creating digital contents such as a flipbook would be an alternative assessment method that focuses both the process and product. This project coined the phrase 'Plan-Design-Share' to describe the instructional strategies in developing a flipbook. A total of 19 first year students from the Bachelor of Education (Information Technology) programme, Universiti Utara Malaysia were involved in the flipbook project. The significance of this project is to replicate this plan-design-share strategy for different subjects and other alternative online assessment methods. This project won a Silver in the Virtual Research and Innovation Exhibition UniMAP (EREKA) 2021. This project is also registered with the Intellectual Property Corporation of Malaysia (MyIPO) under file number LY2021P01049.

Keywords: Flipbook, Plan-Design-Share' Strategy, assessment, instructional strategies

Empowering Students Digital Content Creation Using Flipbook as an Alternative Assessment Through Plan-Design-Share Strategy



Student Adoption and Effectiveness of Flipped Classroom Implementation for Open and Distance Learning Application: A Case of Process Simulation Class

Muhammad Syafiq Hazwan Ruslan Nurul Haiza Sapiee Norazah Abdul Rahman

Universiti Teknologi MARA Shah Alam

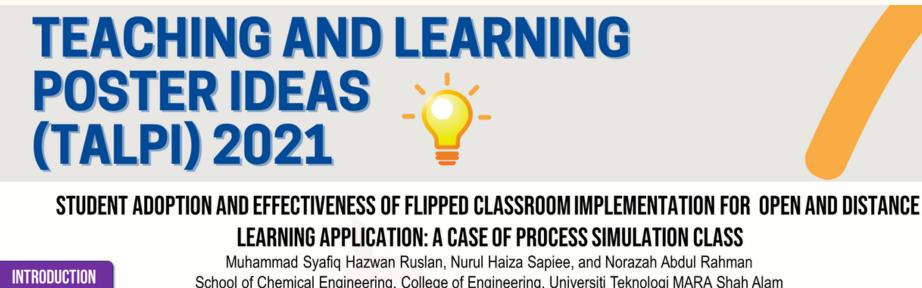
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Abstract

Student-centred learning (SCL) has been proven in increasing students' knowledge attainment and developing their interpersonal skills. Generally, most of the techniques have been developed and utilised for synchronous interactions. However, the COVID-19 pandemic outbreak in Malaysia limits the synchronous interactions between learners and instructors. Due to this matter, a personalized and flexible learning is required to meet the needs of the learner via an online platform. Flipped classroom (FC) approach offers a personalized learning environment for the learners to study the course using pre-recorded materials prior to the in-class session. The synchronous sessions are then dedicated to knowledge confirmation and learning activities. Although this technique is considered promising, regrettably, the learners' acceptance towards FC has yet to be assessed. Furthermore, the were no studies reported on the implementation of FC in a skill-based course. To address this issue, Process Simulation course which comprises of 100 students were selected. This study aims to assess the effectiveness, students' readiness, and acceptance towards the FC approach during ODL. The effectiveness of FC was compared to the conventional synchronous learning based on the students' grade. Meanwhile, a questionnaire was used to assess the students' adoption of FC and the overall implementation of FC. The results showed that students who were taught using the FC approach gave a better performance in their course. In fact, 39.29% of the students who underwent FC approach managed to score A and A- compared to 19.82% of students who went through the conventional delivery of lessons. On student adoption, 100% of the surveyed students agreed that the pre-recorded videos assisted them in preparing for the class. 93.58% of students surveyed agreed that they were able to prepare their simulation before the next class at the end of the semester, compared to 85.32% in the first 4 weeks of the semester. Overall, more than 90% of the students were contented with the instructor, their participation level, learning materials provided, and assessments given to them via the FC approach.

Keywords: Flipped Classroom, approach, Process Simulation course, Open and Distance Learning

Student Adoption and Effectiveness of Flipped Classroom Implementation for Open and Distance Learning Application: A **Case of Process Simulation Class**

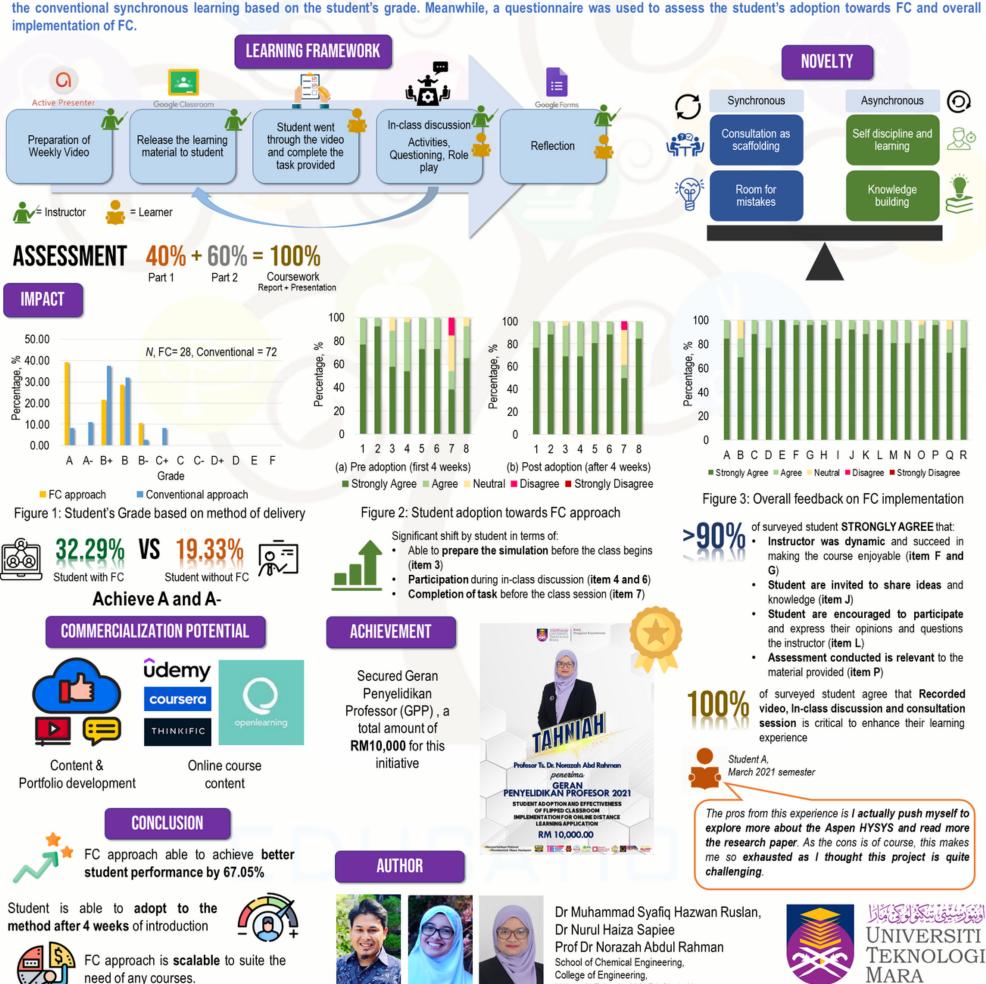


LEARNING APPLICATION: A CASE OF PROCESS SIMULATION CLASS

need of any courses.

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Student centred learning (SCL) has been proven in increasing student's knowledge attainment and developing student's interpersonal skills. Generally, most of the technique has been developed and utilised for synchronous interaction. However, the COVID-19 pandemic outbreak in Malaysia limits the synchronous interaction between the learners and instructors. Due to this matter, a personalized and flexible learning is required to meet the needs of the learner via an online platform. Flipped classroom (FC) approach offers a personalized learning environment for the learners to study the course using pre-recorded material prior to the in-class session. The synchronous sessions are then dedicated to knowledge confirmation and learning activities. Although this technique is considered promising, regrettably, the learner's acceptance towards FC has yet to be assessed. Furthermore, the were no studies reported on the implementation of FC in a skill-based course. To address this issue, Process Simulation course which comprises of 100 students were selected. This study aims to assess the effectiveness, student's readiness, and acceptance towards the FC approach during ODL. The effectiveness of FC was compared to the conventional synchronous learning based on the student's grade. Meanwhile, a questionnaire was used to assess the student's adoption towards FC and overall



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Competition Based Learning: CAPOPCOM

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Abstract

Calculus Project Presentation Competition (CAPOPCOM) is a programme initiated by lecturers who taught Calculus courses. Initially, this is just a standard group project assignment, where students will be answering a few questions related to a particular topic and present their answers. The main objective of this program is to enhance students' understanding of that topic and make the learning more fun. The lecturer initiated a competition where students are required to solve a real-world problem related to the topics they have learned. In addition, this competition will enhance students' soft skills in creativity while making the videos. This competition indirectly can boost students' confidence to talk in public as they need to explain their ideas in a video. This competition-based learning can build their teamwork since this project needs to be done in a group. This programme is helpful as students were more enthusiastic and enjoyed making and completing the videos. There are many ways in how educators can enhance their students' understanding. Organizing this type of competition can be applied to other campuses that offer the same subject. All videos that participated in this competition can then be compiled and commercialized as teaching material for a specific topic since the videos are creative and exciting.

Keywords: Calculus, project, competition

Competition Based Learning: CAPOPCOM

TEACHING AND LEARNING **POSTER IDEAS** (TALPI) 2021



ABSTRACT

Calculus Project Presentation Competition (CAPOPCOM) is a program initiated by lecturers who taught Calculus courses. Initially, this is just a standard group project assignment, where students will be answering a few questions related to a particular topic and present their answers. The main objective of this program is to enhance students' understanding of that topic and make the learning more fun. The lecturer initiated a competition where students require to solve a real-world problem related to the topics they have learned. In addition, this competition will enhance students' soft skills in creativity while making the videos. This competition indirectly can boost students' confidence to talk in public as they need to explain their ideas in a video. This competition-based learning can build their teamwork since this project needs to be done in a group. This program is helpful as students were more enthusiastic and enjoy making and completing the video. There are many ways in how educators can enhance their students' understanding. Organizing this type of competition can be applied to other campuses that offer the same subject. All videos that participated in this competition can then be compiled and commercialized as teaching material for a specific topic since the videos are creative and exciting.

1.0 OBJECTIVES

A competition-based learning created to The students were more enthusiastic enhance students' understanding of as they can engage directly in the topic in Calculus. motivates students to compete in the making and completing the overcoming challenge to improve their because they can contribute their performances in the activities and this creativity. will make the learning more fun.

2.0 ADVANTAGES

Competitions learning activities. Students enjoy video

3.0 USEFULNESS

This competition will sharpen students' soft skills in creativity while making the videos. This program can boost students' confidence to talk in public as they need to present their ideas in a video. This program can build their teamwork since this project needs to be done in a group.

4.0 NOVELTY

This program combines competition-based learning and problem-based learning in a network environment.

5.0 COMMERCIALISATION POTENTIAL

Approach can be reused in other discipline that Mathematics. related Organizing not competition-based learning to other campuses that offer the same subject.

6.0 INVENTORS

- 1) Tammie Christy Saibin
- 2) Janvin Janteng

PhET Circuit Construction Kit: Satu Penyelesaian Litar Sesiri dan Selari

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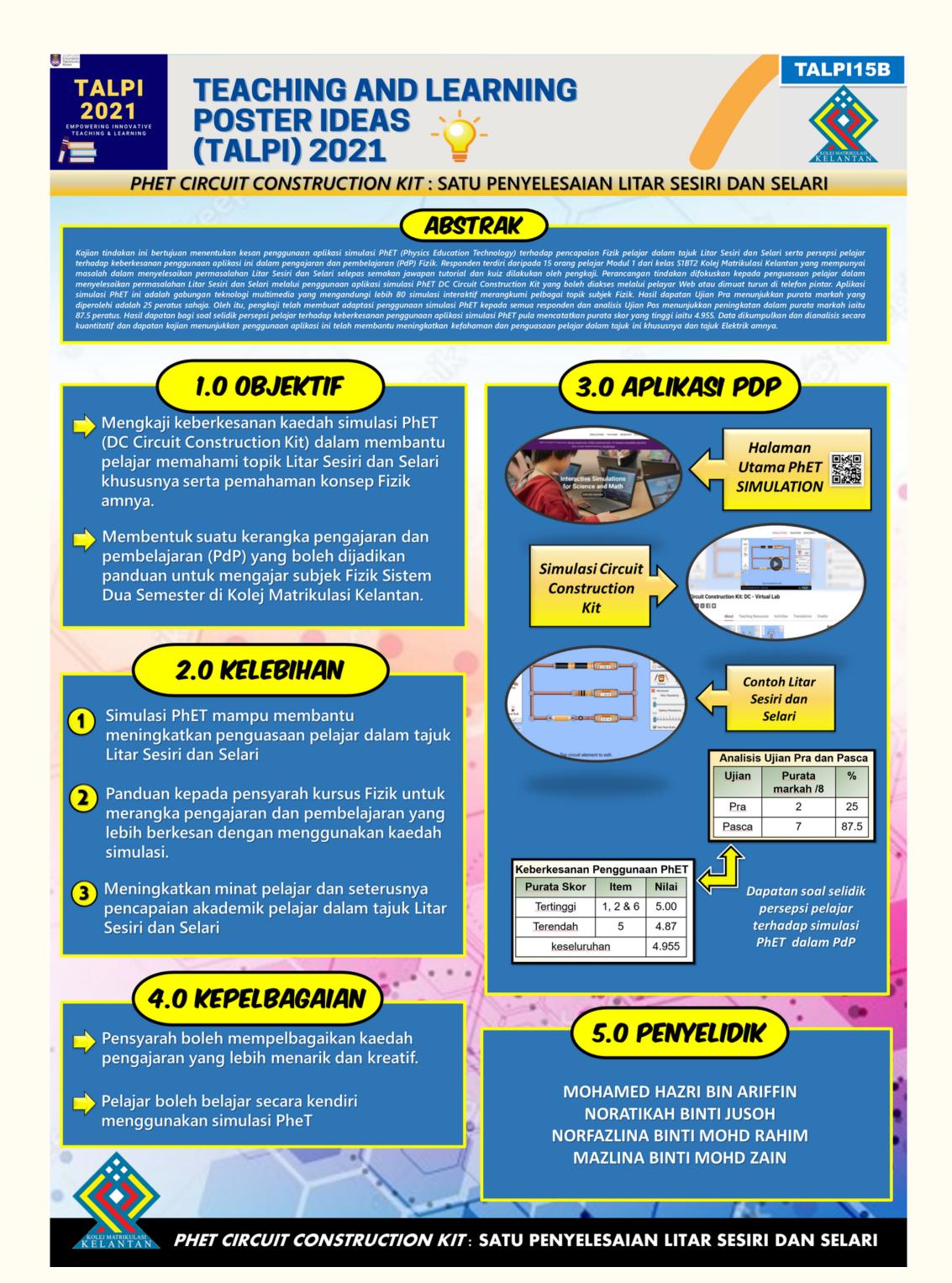
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Abstract

Kajian tindakan ini bertujuan menentukan kesan penggunaan aplikasi simulasi PhET (Physics Education Technology) terhadap pencapaian Fizik pelajar dalam tajuk Litar Sesiri dan Selari serta persepsi pelajar terhadap keberkesanan penggunaan aplikasi ini dalam pengajaran dan pembelajaran (PdP) Fizik. Responden terdiri daripada 15 orang pelajar Modul 1 dari kelas S1BT2 Kolej Matrikulasi Kelantan yang mempunyai masalah dalam menyelesaikan permasalahan Litar Sesiri dan Selari selepas semakan jawapan tutorial dan kuiz dilakukan oleh pengkaji. Perancangan tindakan difokuskan kepada penguasaan pelajar dalam menyelesaikan permasalahan Litar Sesiri dan Selari melalui penggunaan aplikasi simulasi PhET DC Circuit Construction Kit yang boleh diakses melalui pelayar Web atau dimuat turun di telefon pintar. Aplikasi simulasi PhET ini adalah gabungan teknologi multimedia yang mengandungi lebih 80 simulasi interaktif merangkumi pelbagai topik subjek Fizik. Hasil dapatan Ujian Pra menunjukkan purata markah yang diperolehi adalah 25 peratus sahaja. Oleh itu, pengkaji telah membuat adaptasi penggunaan simulasi PhET kepada semua responden dan analisis Ujian Pos menunjukkan peningkatan dalam purata markah iaitu 87.5 peratus. Hasil dapatan bagi soal selidik persepsi pelajar terhadap keberkesanan penggunaan aplikasi simulasi PhET pula mencatatkan purata skor yang tinggi iaitu 4.955. Data dikumpulkan dan dianalisis secara kuantitatif dan dapatan kajian menunjukkan penggunaan aplikasi ini telah membantu meningkatkan kefahaman dan penguasaan pelajar dalam tajuk ini khususnya dan tajuk Elektrik amnya.

Kata Kunci: Aplikasi simulasi PhET DC Circuit Construction Kit, persepsi pelajar, permasalahan Litar Sesiri dan Selari, gabungan teknologi multimedia

PhET Circuit Construction Kit: Satu Penyelesaian Litar Sesiri dan Selari



iGAI (info Grafik Asas Islam)

Norazmi Anas
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Abstrak

iGAI merupakan paparan visual interaktif berasaskan infografik berkaitan prinsip-prinsip asas Islam yang terdiri dari akidah, syariah dan akhlak yang berfungsi sebagai medium Pengajaran dan Pembelajaran (PdP/PnP) alternatif baharu efektif era pemusatan media khususnya kepada golongan muda. Kesepaduan unsur-unsur seperti simbol, grafik, bentuk, gambar, teks dan ilustrasi menghasilkan informasi yang ringkas, padat dan mudah difahami serta menjimatkan masa. Situasi semasa pandemik COVID-19 menjadikan PdP/PnP berubah kepada norma baharu berteraskan ICT yang lebih sesuai kepada pelajar masa kini selari dengan perkembangan Revolusi Industri 4.0 dan pendidikan digital dunia globalisasi semasa. Dapatan awal mendapati bahawa elemen infografik yang diterapkan dalam iGAI berjaya menarik minat pelajar untuk mengetahui, memahami dan mendalami prinsip-prinsip asas Islam dengan mudah, ringkas dan pantas. iGAI merupakan hasil rekacipta yang ke-3 selepas i-MAPS (Peta Minda Interaktif) pada tahun 2017 dan i-Syamila (Permainan Silmulasi Berpapan) pada tahun 2019. Projek ini ditaja pada peringkat awal oleh Universiti Teknologi MARA melalui dana penyelidikan ARAS, kod penyelidikan: 600-RMI/DANA 5/3/ARAS (49/2015) bertajuk Model Peta Minda Interaktif (PMI) CTU101 & CTU151 dan berjaya memperoleh 2 pingat Emas, 1 pingat Perak dan 1 anugerah 'Aspiring Innovator' dalam pertandingan inovasi peringkat UiTM dan antarabangsa serta berjaya menerbitkan 1 Artikel Jurnal berindeks 'Web of Science-WoS' dan 1 Prosiding Konferensi Antarabangsa terbitan Springer Nature Singapore Pte Ltd.

Kata Kunci: Visual interaktif, iGAI, infografik

iGAI (info Grafik Asas Islam)



effeChemTorials (Effective Chemistry Tutorial)

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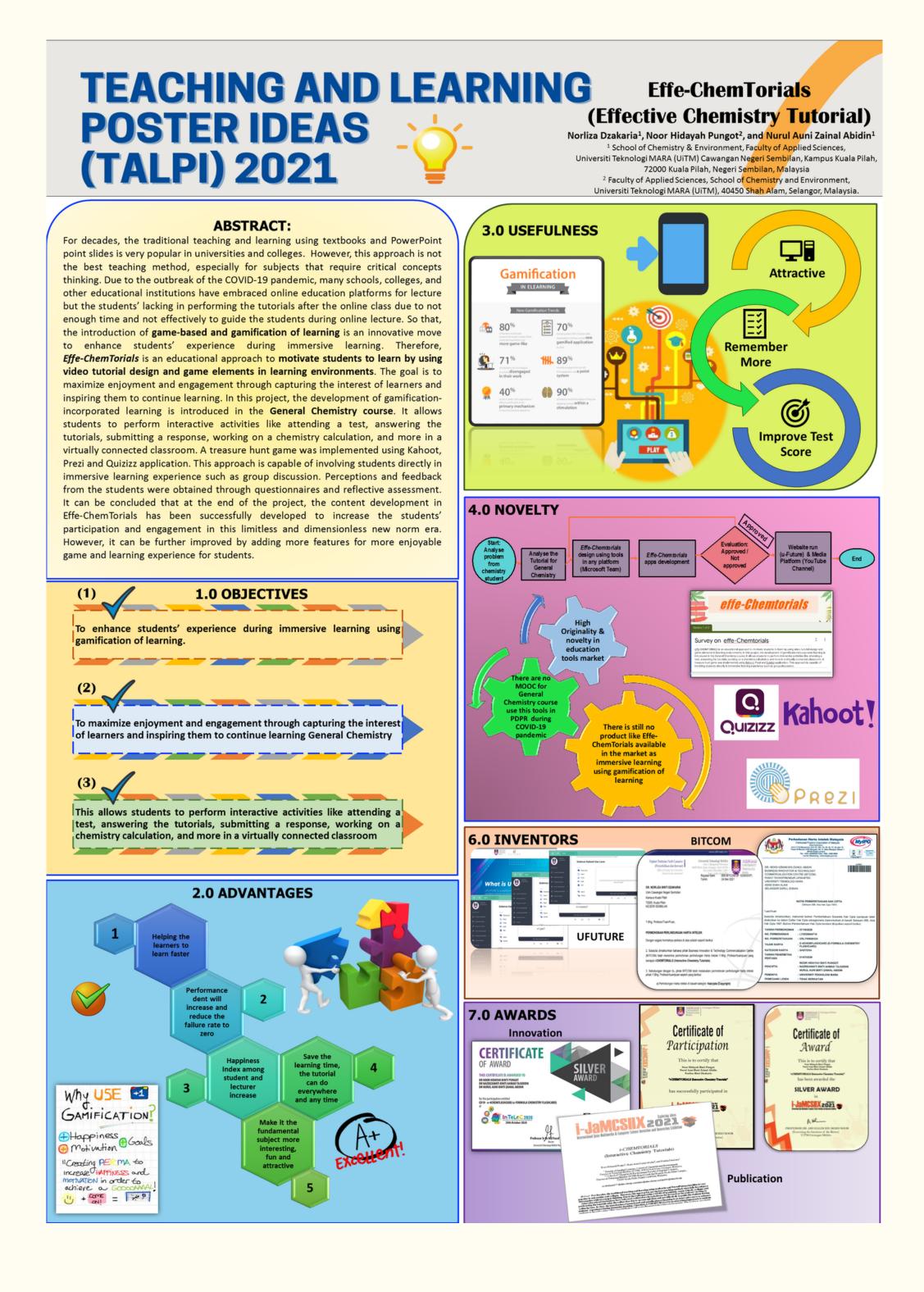
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Abstract

For decades, the traditional teaching and learning using textbooks and PowerPoint point slides are very popular in universities and colleges. However, this approach is not the best teaching method, especially for subjects that require critical concepts thinking. Due to the outbreak of the COVID-19 pandemic, many schools, colleges, and other educational institutions have embraced online education platforms for lectures, but the students' have been performing poorly during the tutorials after the online class due to time constraint and ineffective guidance received during online lectures. Hence, the introduction of game-based and gamification of learning is an innovative move to enhance students' experience during immersive learning. Therefore, effeChemTorials is an educational approach to motivate students to learn by using video tutorial design and game elements in learning environments. The goal is to maximize enjoyment and engagement through capturing the interest of learners and inspiring them to continue learning. In this project, the development of gamification-incorporated learning is introduced in the General Chemistry course. It allows students to perform interactive activities like attending a test, answering the tutorials, submitting a response, working on a chemistry calculation, and more in a virtually connected classroom. A treasure hunt game was implemented using Kahoot, Prezi and Quizizz applications. This approach is capable of involving students directly in immersive learning experience such as group discussion. Perceptions and feedback from the students were obtained through questionnaires and reflective assessment. It can be concluded that at the end of the project, the content development in effeChemTorials has been successfully developed to increase the students' participation and engagement in this limitless and dimensionless new norm era. However, it can be further improved by adding more features for more enjoyable game and learning experience for students.

Keywords: EffeChemTorials, video tutorial design, game elements

effeChemTorials (Effective Chemistry Tutorial)



PhlebVE21: A smart phlebotomy training model

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Abstract

Phlebotomy is a skill required to draw blood from patients. The blood will be used for laboratory tests and disease diagnosis. Phlebotomy course is required to be taken by students of Diploma in Nursing, Medical Laboratory Technology and Bachelor of Medicine. The course required students to attend laboratory sessions where they will use phlebotomy training model arm to practice phlebotomy. Practices are important to familiarize students with the anatomy of blood vessels, the feeling of blood vessels palpation and accuracy of needle insertion. This will help students to enhance their skill and confidence before performing phlebotomy in real patients. However, students are unable to use facilities in the laboratory due to movement control order (MCO) restrictions that prohibited students of coming back to campus. Teaching and learning have been conducted online. All students required to stay at home. Therefore, a phlebotomy training arm that is user-friendly and cost-effective which enable students to practice phlebotomy at home is in great demands. The cost for this invention is far cheaper than phlebotomy training model that we have in the market. Therefore, it can be sold at a very competitive price. The cheapest in the market is costs more than RM500 per unit. Our price is expected to be around RM30 which is very reasonable for students. Phlebotomy training model that we have in the market are prone to develop bubble problem. Bubbles trapped along the tube will cause problems during aspiration of the fake blood through the syringe. Our invention, PhlebVE21 is equipped with valve and pump which can prevent bubble entrapment inside tubes, thus ensure smooth phlebotomy trainings. This feature is the niche of our product and has never been introduced in the market. On top of that, our product is easy to assemble and easy to use.

Keywords: PhlebVE21, phlebotomy, phlebotomy training arm

PhlebVE21: A smart phlebotomy training model

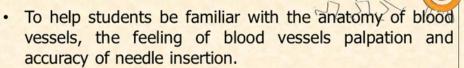
TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



PhlebVE21: A smart phlebotomy training model ABSTRACT

- Phlebotomy is a skill required to draw blood from patients to be used for laboratory tests and disease diagnosis. It is a
 pre-requisite course for Diploma in Nursing, Medical Laboratory Technology and Bachelor of Medicine. During lab
 session, students used phlebotomy training model arm to practice phlebotomy.
- However, students are unable to use facilities in the laboratory due pandemic and movement control order (MCO)
 restrictions. Teaching and learning have been conducted online. All students required to stay at home. Therefore, a
 phlebotomy training arm that is user-friendly and cost-effective which enable students to practice phlebotomy at home
 is in great demands.
- PhlebVE21 is a smart phlebotomy training model which could assists teaching and learning of phlebotomy course. It is
 made of fake blood depository, robust tubes, pumping mechanism that resembles humans' heart pumping system and
 could prevent bubble entrapment during training procedure. The smart valve and pump fulfilled the market niche which
 can prevent bubble entrapment inside tubes, thus ensure smooth phlebotomy trainings.
- The robustness, bubble prevention mechanism, user-friendly and cost-effectiveness of PhlebVE21 has high potential to attract students and educators of health sciences.

1.0 OBJECTIVES



- To enhance student's skill and confidence before performing phlebotomy in real patients.
- To use for practice phlebotomy skills at home since students are unable to use facilities in the laboratory due to movement control order (MCO) restrictions.

2.0 ADVANTAGES



- Smart valve pump: Prevent fake blackflowing and prevent bubble entrapment.
- Resembles human anatomy: the smart pump representing heartbeat, valve imitating heart valve and 3 tubes that representing 3 type of veins (basilic, median cubital and cephalic vein).
- Robust tubes: can withstand repeated punctures up to 1000 times without leakage.
- Enhance students' skill and confidence.

3.0 USEFULNESS



- PhlebVE21 is conducive for phlebotomy training.
- It provides an alternative in developing phlebotomy skill before working with real patients.
- The robust material of the tubes enabled more than 1000 times of needle insertion.
- It also has huge potential in assisting lectures during teaching and learning session.

4.0 NOVELTY



- The existing phlebotomy training models are prone to develop bubble entrapment along the tube which interfere with aspiration of the fake blood through the syringe.
- PhlebVE21 is equipped with smart valve and pump which can prevent bubble entrapment inside tubes, thus ensure smooth phlebotomy trainings.
- This feature is the niche of our product and has never been introduced in the market.
- This phlebotomy training model is also easy to assemble and uncomplicated to use.

5.0 COMMERCIALISATION POTENTIAL

- Very competitive price: The cheapest in the market is costs more than RM500 per unit. Our price is expected to be around RM20 only.
- Very affordable price range for students.
- The smart valve and pump feature is capable to outbid the existing model in the market.
- Can be used as teaching and learning tool for diverse audience of health science and medical field.

6.0 INVENTORS



- 1. Siti Farizan Mansor
- 2. Muhammad Aqil Abbasy Bin Mohd Pudzi
- 3. Hasif Hamdani Bin Suhaimi
- 4. Muhammad Shazman Bin Baderol
- 5. Shafy Hilmy Bin Zainal Abu
- 6. Muhammad Hanif bin Ali

Red IVY: Your Phlebotomy Companion model

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Abstract

Phlebotomy is a skill required to draw blood from patients. The blood will be used for laboratory tests and disease diagnosis. Phlebotomy course is required to be taken by students of Diploma in Nursing, Medical Laboratory Technology and Bachelor of Medicine. The course required students to attend laboratory sessions where they will use phlebotomy training model arm to practice phlebotomy. Practices are important to familiarize students with the anatomy of blood vessels, the feeling of blood vessels palpation and accuracy of needle insertion. This will help students to enhance their skill and confidence before performing phlebotomy in real patients. However, students are unable to use facilities in the laboratory due to movement control order (MCO) restrictions that prohibited students of coming back to campus. Teaching and learning have been conducted online. All students required to stay at home. Therefore, a phlebotomy training arm that is user-friendly and cost-effective which enable students to practice phlebotomy at home is in great demands. Red IvY is a smart phlebotomy training model which could assists teaching and learning of phlebotomy course. It is made of fake blood depository, robust tubes, bottle pumping mechanism that resembles humans' heart pumping system and could prevent bubble entrapment during training procedure. The robust material of the tubes enabled more than 1000 times of needle insertion. Phlebotomy training model that we have in the market are prone to develop bubble problem. Bubbles trapped along the tube will cause problems during aspiration of the fake blood through the syringe. Our invention, Red IvY is equipped with bottle pumping mechanism which can prevent bubble entrapment inside tubes, thus ensure smooth phlebotomy trainings. This feature is the niche of our product and has never been introduced in the market before. The cost for this invention is far cheaper than phlebotomy training model that we have in the market. Therefore, it can be sold at a very competitive price. The cheapest in the market is costs more than RM500 per unit. Our price is expected to be around RM20 which very reasonable for students. On top of that, Red IvY is easy to assemble and uncomplicated to use.

Keywords: Phlebotomy, Red IvY, phlebotomy training model

Red IVY: Your Phlebotomy Companion model

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021

Red IvY: Your Phlebotomy Companion

ABSTRACT

- Phlebotomy is a skill required to draw blood from patients to be used for laboratory tests and disease diagnosis. It is a pre-requisite course for Diploma in Nursing, Medical Laboratory Technology and Bachelor of Medicine. During lab session, students used phlebotomy training model arm to practice phlebotomy.
- However, students are unable to use facilities in the laboratory due pandemic and movement control order (MCO) restrictions. Teaching and learning have been conducted online. All students required to stay at home. Therefore, a phlebotomy training arm that is user-friendly and cost-effective which enable students to practice phlebotomy at home is in great demands.
- Red IvY is a smart phlebotomy training model which could assists teaching and learning of phlebotomy course. It is made of fake blood depository, robust tubes, bottle pumping mechanism that resembles humans' heart pumping system and could prevent bubble entrapment during training procedure. The robust material of the tubes enabled more than 1000 times of needle insertion.
- The robustness, bubble prevention mechanism, user-friendly and cost-effectiveness of Red IvY has high potential to attract students and educators of health sciences.

1.0 OBJECTIVES

- To help students be familiar with the anatomy of blood vessels, the feeling of blood vessels palpation and accuracy of needle insertion.
- To enhance student's skill and confidence before performing phlebotomy in real patients.
- To use for practice phlebotomy skills at home since students are unable to use facilities in the laboratory due to movement control order (MCO) restrictions.

3.0 USEFULNESS



- Red IvY is conducive for phlebotomy training.
- It provides an alternative in developing phlebotomy skill before working with real patients.
- The robust material of the tubes enabled more than 1000 times of needle insertion.
- It also has huge potential in assisting lectures during teaching and learning session.

5.0 COMMERCIALISATION **POTENTIAL**

- Very competitive price: The cheapest in the market is costs more than RM500 per unit. Our price is expected to be around RM20 only.
- Very affordable price for students range.
- The tubes and melamine sponge can be replaced after maximum usage.
- Can be used as teaching and learning tool for health science and medical study.

2.0 ADVANTAGES



- The same puncture site of the venous blood vessels and skin can withstand 1000 of repeated punctures without leakage.
- The venous blood vessels and skin can be replaced, which is simple, convenient and economical.
- Provide a clear sense of blood vessels palpation and accuracy of needle insertion
- Enhance students' skill and confidence before performing phlebotomy in real patients.

4.0 NOVELTY



- The existing phlebotomy training models are prone to develop bubble entrapment along the tube which interfere with aspiration of the fake blood through the syringe.
- Red IvY has bottle pumping mechanism -prevention of bubble entrapment inside tubes, thus ensure smooth phlebotomy trainings.
- This feature is the niche of our product and has never been introduced in the market before.
- The replaceable skin and veins are the educational elements added and ideally designed for phlebotomy practice.
- This phlebotomy training model is also easy to assemble and uncomplicated to use.

6.0 INVENTORS



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- 2. Nur Khairani Ayuni binti Adnan
- 3. Anis Syazwani binti Zamzuri @ Zamli
- 4. Aniss Juzaeffa binti Juna
- 5. Qistina Humaira binti Khairul Anuar
- 6. Noorshawati Asikin binti Ahmad Mahadi

Using SmatVLab to Enhance Engineering Student's Psychomotor Skills During the COVID-19 Pandemic.

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Abstract

The spread of the novel coronavirus (COVID-19) has disrupted education at a large number of universities around the world, including Malaysia. As a result, an increasing number of universities have taken the necessary steps to transform teaching activity including laboratory into online or blended mode of delivery. Regardless of the steps taken, it becomes a major concern to maintain academic standards and provide high quality student experience in order to meet the learning outcomes associated with each degree programme. For laboratory subjects, it is not only about the content to be delivered, but also how to develop student's psychomotor skills, especially as they have had limited or no access to laboratory facilities, and hands-on experiments have been unavailable. To solve the problem, a web-based virtual laboratory known as SmatVLab is developed to ensure the attainment of practical skills of students through technologies. Aligned with Education 4.0, SmatVLab is a platform for students to perform the experiments in using simulation develop in computer or mobile. SmatVLab contain theoretical background, virtual lab experiments and activities after experiment such as result analysis, quizzes and writing report. The survey were collected from a group of 192 students in Faculty of Civil Engineering Universiti Teknologi MARA, Shah Alam. About 67.5% of the students prefer using SmatVLab compare to conventional learning for better understanding of the laboratory. Indeed, SmatVLab is an alternative platform for Civil Engineering students to perform Structures and Materials Laboratory experiment and enhance their knowledge and experience.

Keywords: Phlebotomy, SmatVLab, engineering students, experiment, simulation

Using SmatVLab to Enhance Engineering Student's **Psychomotor Skills During the COVID-19 Pandemic**

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021

Using SmatVLab to Enhance Engineering Student's Psychomotor Skills During the COVID-19 Pandemic



Nazirah Ab. Wahab¹, Norliyati Mohd Amin¹, Warid Wazien Ahmad Zailani¹, Nor Mayuze Mohamad², Hamidah Mohd Saman¹ ¹School of Civil Engineering, College of Engineering, Universiti Teknologi MARA Shah Alam ²School of Civil Engineering, College of Engineering, Universiti Teknologi MARA Pasir Gudang

ABSTRACT The spread of the novel coronavirus (COVID-19) has disrupted education at a large number of

universities around the world, including Malaysia. As a result, an increasing number of universities have taken the necessary steps to transform teaching activity including laboratory into online or blended mode of delivery. Regardless of the steps taken, it becomes a major concern as to maintain academic standards and provide high quality student experience in order to meet the learning outcomes associated with each degree programme. For laboratory subject, it is not only about the content to be delivered, but also how to develop student's psychomotor skill especially as they have had limited or no access to laboratory facilities, and hands-on experiment has been unavailable. To solve the problem, a web-based virtual laboratory known as SmatVLab is developed to ensure the attainment of practical skill of students through technologies. Aligned with Education 4.0, SmatVLab is a platform for students to perform the experiments in using simulation develop in computer or mobile. SmatVLab contain theoretical background, virtual lab experiments and activities after experiment such as result analysis, quizzes and writing report. The survey has been collected from a group of 192 students in Faculty of Civil Engineering Universiti Teknologi MARA, Shah Alam. About 67.5% of the students prefer using SmatVLab compare to conventional learning for better understanding of the laboratory. Indeed, SmatVLab is an alternative platform for Civil Engineering students to perform Structures and Materials Laboratory experiment and enhance their knowledge and experience.

OBJECTIVES

1. To provide remote-access to simulation-based laboratory in Structures and Materials course.

2. To develop students psychomotor ability amid the limitations of hands-on experiment during COVID-19.

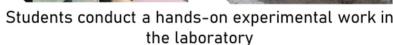
LABORATORY DELIVERY METHOD

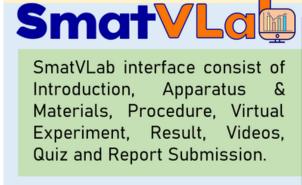
	Instructor	Students
Conventional	Hands-on demonstration	Hands-on experiment
ODL	Video demonstration	SmatVLab

Conventional hands-on demonstration

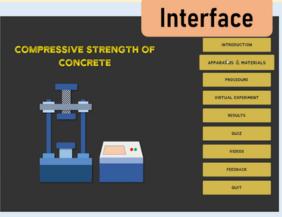


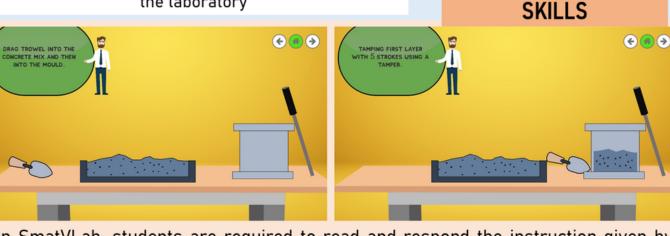




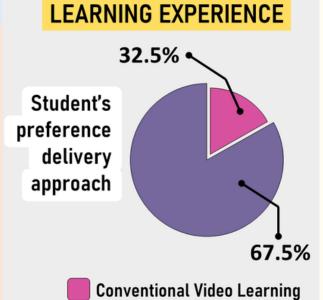


PSYCHOMOTOR





In SmatVLab, students are required to read and respond the instruction given by using a unique features called DRAG and DROP. For example, the students need to click on the hand trowel, hold it on the concrete, drag and drop it into the mould. Therefore, students can experience the experiments and understand the procedure involves better rather than only watching the demonstration videos.



SmatVLab

ADVANTAGES

- Assess anywhere and at anytime
 Measure understanding through online quiz
- Opportunity to repeat experiment multiple times
 Experience to work independently

CONCLUSION In conclusion, SmatVLab web-based application is a suitable learning tool in rebooting the education system as it helps the engineering student to enhancing their conceptual understanding, lab skills, interest, perception, and improve teaching quality and student learning outcomes in Structures and Materials Laboratory-based practical experiments.

ICA Concept in Communication Engineering Fundamental Course

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Abstract

Communication Engineering Fundamental is a compulsory subject for students pursuing Bachelor of Electrical and Electronics Engineering or Bachelor of Electrical Engineering at the School of Electrical Engineering UiTM. This course covers the basic concepts and theories of electronic communication systems, including analogue and digital communication systems, as well as their applications. Students should thoroughly understand the concept in obtaining good grades in this subject. Previous research has shown that students who actively engaged in class and with the learning materials gain more knowledge than those who participate passively. Cognitive engagement is frequently mentioned as an important aspect of educational process, where integration of interactive, constructive and active (ICA) is a concept that is used by educators in classroom. Two tests and a final assessment were used to evaluate students' performance in the classroom. The data was collected from semesters October 2020-March 2021 & Mac 2021-July 2021, and the performance of course and programme outcomes were analysed using the Outcome Base Education Evaluation Tool (OBEET) System. The performance of course and programme outcome were meet Key Performance Indicator more than 65% for both semester.

Keywords: ICA Concept, Communication Engineering Fundamental, engineering

ICA Concept in Communication Engineering Fundamental Course





ICA CONCEPT IN COMMUNICATION ENGINEERING FUNDAMENTAL COURSE

ABSTRACT

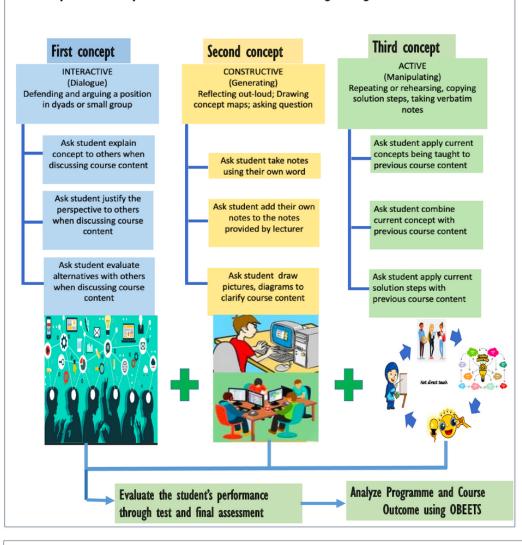
Communication Engineering Fundamental is a compulsory subject for students pursuing a Bachelor of Electrical and Electronics Engineering or a Bachelor of Electrical Engineering at the School of Electrical Engineering UiTM. This course covers the basic concepts and theories of electronic communication systems, including analogue and digital communication systems, as well as their applications. Students should thoroughly understand the concept in obtaining good grades in this subject. Previous research has shown that students who actively engaged in class and with the learning materials gain more knowledge than those who participate passively. Cognitive engagement is frequently mentioned as an important aspect of educational process, where integration of interactive, constructive and active (ICA) is a concept that is used by educators in classroom. Two tests and a final assessment were used to evaluate students' performance. The data was collected from semesters October 2020-March 2021 & Mac 2021-July 2021, and the performance of course and programme outcomes was analyzed using the Outcome Base Education Evaluation Tool (OBEET) System. The performance of course and program outcome were meet Key Performance Indicator more than 65% for both semester.

1.0 OBJECTIVES

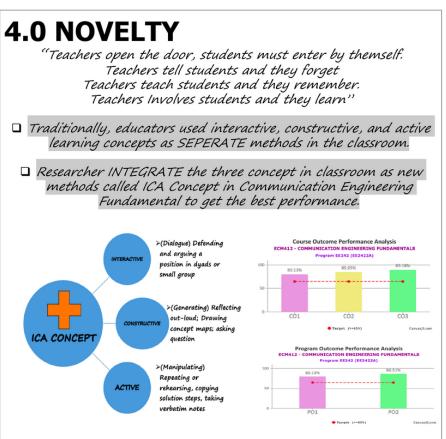
- ☐ To apply the ICA concept in the classroom for Communication Engineering Fundamentals course.
- To assess the performance of course outcomes and programme outcomes following the implementation of the ICA concept in the Communication Engineering Fundamentals course.

3.0 USEFULNESS - ICA Framework

 Integrating the interactive, constructive, and active learning concepts in the classroom to improve student performance in the Communication Engineering Fundamental course.



2.0 ADVANTAGES INTERACTIVE ACTIVE (Manipulating) (Generating) (Dialogue) Improved Classroom preparation, retention critical thinking, analysis evaluation, and creation. Allow student to practice their Promotes diverse viewpoints skills, relate to and replicate Sharper Critical Thinking Skills Encourages students to reflect, evaluate their work, and identify More Immersion intermediary skills to acquire based on their needs. Reflects our modern world's vast access to content







Integrating Theoretical Knowledge and Skills into Students' Group Assignment

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Abstract

Throughout their years of study, students have been taught and gained knowledge as well as skill sets related to the courses they have undertaken. As for the Diploma in Pharmacy programme in Universiti Teknologi MARA (UiTM), the first two years of the study prepares and equips the students with essential theoretical knowledge and practical skills through life sciences, pharmacology and pharmaceutics courses. Likewise, communication and counselling skills are also taught apart from English language speaking and writing skills. These knowledge and skills gained by the students will support them during their training period in the hospitals and other health facilities before they can successfully graduate from their study. Therefore, a group assignment integrating the various knowledge and skill sets was assigned for one the courses in the later semester of the second year of their study. This group assignment requires students to interview patients with certain health conditions or diseases and present their findings as written interview reports and video recordings. During the interview, students will ask a set of questions to the selected patient and record the event of the interview session. Students will then write their interview report, edit and upload the recorded video into YouTube. Hence, students' knowledge on diseases and medications, their talking and counselling skills as well as writing skills are being integrated and evaluated in one assignment. Moreover, students also developed soft skills on how to participate and work in group by interacting with group members while completing their assigned task. Additionally, they will also gather technical and digital knowledge while working on the related components of their assignment.

Keywords: Theoretical Knowledge , skills , group assignment

Integrating Theoretical Knowledge and Skills into Students' Group Assignment





INTEGRATING THEORETICAL KNOWLEDGE AND SKILLS INTO STUDENTS' GROUP ASSIGNMENT

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ABSTRACT

Throughout their years of study, students have been taught and gained knowledge as well as skill sets related to the courses they have undertaken. As for the Diploma in Pharmacy programme in Universiti Teknologi MARA (UiTM), the first two years of the study prepares and equips the students with essential theoretical knowledge and practical skills through life sciences, pharmacology and pharmaceutics courses. Likewise, communication and counselling skills are also taught apart from English language speaking and writing skills. These knowledge and skills gained by the students will suffice them during their training period in the hospitals and other health facilities before they can successfully graduate from their study. Therefore, a group assignment integrating the various knowledge and skill sets was assigned for one the courses in the later semester of the second year of their study. This group assignment requires students to interview patients with certain health conditions or diseases and present their findings as written interview reports and video recordings. During the interview, students will ask a set of questions to the selected patient and record the event of the interview session. Students will then write their interview report, edit and upload the recorded video into YouTube. Hence, students' knowledge on diseases and medications, their talking and counselling skills as well as writing skills are being integrated and evaluated in one assignment. Moreover, students also developed soft skills on how to participate and work in group by interacting with group members while completing their assigned task. Additionally, they will also gather technical and digital knowledge while working on the related components of their assignment.

1.0 OBJECTIVES

To provide an all-in-one type of assignment that:

- Covers all three learning domains (cognitive, affective and psychomotor)
- 2.Measures students' theoretical knowledge and skill sets
- 3. Develops students' soft skills
- 4.Encourages students to explore into new knowledge

2.0 ADVANTAGES

1. Holistic

One group assignment that incorporates all learning domains.

2. Student-centred

Students make full use of their theoretical knowledge and skills in completing the tasks. Students ventured and explored new knowledge. Students developed soft skills in managing group work.

3. Efficient and Effective

Efficient – only one assignment that encompasses all relevant aspects of the course.

Effective – knowledge and skills are tested, acquired, developed and expanded

3.0 USEFULNESS

- 1.Excellent example of a group assignment that integrates theoretical knowledge and skill sets.
- Interview, video recording and written report are the components of the assignment that cover all learning domains.
- 3. Students' reports could be used for content analysis writing.

4.0 NOVELTY

- 1.One integrated assignment that covers cognitive, affective and psychomotor domains.
- 2. Assignment components tailored to assess knowledge and skills learnt through various courses.
- 3.Empower students to venture into new knowledge and soft skills.

5.0 COMMERCIALISATION POTENTIAL

This academic intention is not aimed for immediate commercialisation. Still, a prototype of a web-based application and relevant database could be developed in near future.

6.0 INVENTOR

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Microbial Art Virtual Exhibition (MAVE): A new Approach for Evaluation of Students' Assignments

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Abstract

The virtual learning environment (VLE) provides an interactive, flexible, convenience and opportunity to enhance students' engagement during online and distance learning. Our innovation is to implement VLE in students' formative assessment i.e., the Microbial Art Virtual Exhibition (MAVE). The MAVE via VLE assessment requires students to create unique artworks using different types of microorganisms, mediums and techniques. Students will then create a digital poster explaining their concepts and exhibit their artwork via the MAVE platform. The approach provides flexibility and convenience to students, where they will be able to work at their own pace and time in completing and submitting their tasks. The MAVE is designed to resemble a sophisticated place where students' works are displayed in a more engaging and interesting way. By submitting only their digital posters online and no longer need to set-up their booth as per the traditional exhibition, this virtual exhibition provides a non-face-to-face interaction, efficient and time-saving methods. Evaluators will be able to effortlessly move between the digital posters and conduct their evaluations without hassle. The assessment using MAVE is not only convenient, interactive and engaging, but also provides an elegant space for students, educators and learners to feel at ease in an enjoyable environment.

Keywords: microbial art, virtual exhibition, virtual learning environment

Microbial Art Virtual Exhibition (MAVE): A new Approach for Evaluation of Students' Assignments

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



MICROBIAL ART VIRTUAL EXHIBITION (MAVE): A NEW APPROACH FOR EVALUATION OF STUDENTS' ASSIGNMENTS

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ABSTRACT

The virtual learning environment (VLE) provides an interactive, flexible, convenience and opportunity to enhance students' engagement during online and distance learning. Our innovation is to implement VLE in students' formative assessment *i.e.*, the Microbial Art Virtual Exhibition (MAVE). The assessment of MAVE *via* VLE requires students to create unique artworks using different types of microorganisms, mediums and techniques. Students will then create a digital poster explaining their concepts and exhibit their artwork via the MAVE platform. The approach provides flexibility and convenience to students, where they will be able to work at their own pace and time in completing and submitting their tasks. The MAVE is designed to resemble a sophisticated place where students' works are displayed in a more engaging and interesting way. By submitting only their digital posters online and no longer need to set-up their booth as per the traditional exhibition, this virtual exhibition provides a non-face-to-face interaction, efficient and time-saving methods. Evaluators will be able to effortlessly move between the digital posters and conduct their evaluations without hassle. The assessment using MAVE is not only convenient, interactive and engaging, but also provides an elegant space for students, educators and learners to feel at ease in an enjoyable environment.

1.0 OBJECTIVES

Our innovation adopts simulation as a method of teaching strategy and aims to:

- > improve evaluation process
- > enhance interest in microbiology
- > encourage students' engagement
- \succ increase the effectiveness of teaching and learning

3.0 USEFULNESS

- helps educators create a fully immersive teaching environment and improve teaching quality
- provide a platform where students, educators and learners can enjoy the learning process, view each other works through the simulation and engaged with the lesson.

4.0 NOVELTY

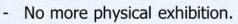
- ➤ MAVE is designed to resemble a sophisticated place where all students' works are displayed in a more engaging and interesting way.
- ➤ It has the same concept as physical exhibitions and users can experience the real exhibition feeling.
- Furthermore, the graphical user interface, navigation experience and interactive digital content in MAVE make them a useful tool for student assessment.

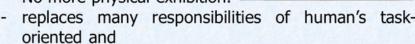
5.0 COMMERCIALISATION POTENTIAL

This was an academic goal with no immediate commercial potential; however, this teaching strategy can be applied into various micro credential and open learning courses.

2.0 ADVANTAGES

> Convenient





- overcome the capacity limit problem of physical exhibitions

> Flexible

 work at their own pace and time in completing and submitting their tasks.

Cost effective and time saving

- submit digital posters online and no longer need to prepare poster and set-up their booth
- increase the efficiency of teaching and learning support
 - better digital image compared to printed image.
 - Efficient evaluation process Evaluators will be able to effortlessly move between the digital posters and conduct their evaluations without hassle; less paperwork

6.0 INVENTORS



Suraya Sulaiman (Dr.) Senior Lecturer



Mohd Izani Othman (Dr.) Senior Lecturer



Mohd Nadzri Mohd Najib (Dr.) Senior Lecturer Faculty of Pharmacy, Universiti Teknologi MARA, Cawangan Pulau Pinang, Kampus Bertam, 13200 Pulau Pinang, Malaysia

Creating Infographic as Assessment Tool in the Pharmacology of Anti-Infective Course

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Abstract

From previous studies, the infographic has been efficient in presenting medical information. A good infographic should be sufficiently informative to stand independently, with no description or further presentation needed. In the era of social media and the covid-19 pandemic, it is apparent that creating an infographic is an essential skill for a prospective pharmacist to meet the needs of today's society. Especially where misinformation is rampant among gullible members of the society, which is a threat to providing good healthcare service. The work presented is about an infographic assignment given to the second-year student of the Faculty of Pharmacy, UiTM. It is part of their continuous assessment in the pharmacology of the anti-infective course. It was introduced in the March 2020 semester to replace one of the face-to-face presentation assignments due to the activation of ODL in UiTM. The students were divided into a group of four, and each group was given two weeks to create an infographic. They were allowed to use any infographic maker applications. A case and questions about sporotrichosis were given, thus challenging students' skills to select, include and arrange the most relevant information about the pharmacology of drugs used in sporotrichosis treatment. This activity evaluated the critical thinking skill of the student. Furthermore, with onlinedistance learning, some students have problems with an internet connection; therefore, the students' ability to explore online platforms to create, collaborate, and share responsibilities was also observed. From the infographics, it was remarkable to observe the involvement and dedication of the students in creating aesthetically pleasing and all-around informative infographics. This assessment tool is an effort by the lecturer to include collaborative, personalized, and empowering experiences in learning with an aim to equip students with skills to be informative health care providers in the future.

Keywords: Infographic, critical thinking skill, assessment tool, Pharmacology of Anti-Infective Course

Creating Infographic as Assessment Tool in the Pharmacology of Anti-Infective Course





CREATING INFOGRAPHIC AS ASSESSMENT TOOL IN THE PHARMACOLOGY OF ANTI-INFECTIVE COURSE

Salfarina Ramli

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Background

- Previous studies showed infographic has been efficient in presenting medical information.
- The work presented is about infographic assignment for the second-year student of the Faculty of Pharmacy, UiTM.
- It is being introduced to replace one of the face-to-face presentation assignments in the Pharmacology of Anti-infective course due to activation of ODL in UiTM.

Assessment tool

Part 1: Instruction to prepare infographic

Students are divided into a group of four.

A case and questions about sporotrichosis along with instructions to prepare infographic are given

Each group are given two weeks to create an infographic

Part 2: Rubrics of the infographic

The rubric evaluates:

- Ability of student to explore online platform to create, collaborate and share the responsibilities
- 2. Quality of the information presented in the infographic.
- 3. Creativity of the student.

Objective of the Assessment tool

 The aim of this assessment tool is to challenge student's skill to select, include and creatively arrange the most relevant information about the pharmacology of drugs used in sporotrichosis treatment.

Usefulness

- ➤ In the era of social media and covid-19 pandemic, where misinformation is rampant among gullible members of the society, which in turn is a threat to provide a good health care service.
- ➤ Therefore, creating effective infographic not only cultivates a higher thinking order skill, but has become is an essential skill for a prospective pharmacist to meet the needs of today's society.

Advantage

This assessment tool is suitable to include collaborative, personalized, and empowering experience in learning with an aim to equip students with skills to be informative health care providers in the future.

Novelty and Commercialization potential

- This assessment tool is different than previous tool in this subject, as it cultures skills important to create aesthetically pleasing, and all-round informative infographics.
- In the future, the commercialization potential lies in the consultation of the expert lecturers and the module.

PhlebVE21: A Smart Phlebotomy Training Arm Model

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Asna Najihah Azman
Khairun Najwa Hamzah
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Abstract

Phlebotomy Training Arm toolkit is a do-it-yourself toolkit designed for university students who are currently taking or studying a course that teaches them how to draw blood samples. This Toolkit is used to assist students to practice their phlebotomy skills at home during online classes. Due to the increasing number of daily COVID-19 cases in Malaysia, university students were restricted from coming back to the campus to attend practical sessions with their lecturers. This is especially hard for the Medical Laboratory Technology students who require plenty of "hands-on" sessions in the laboratory. Understanding parents, family members and lecturers are essential to ensure that these students are equipped with the correct phlebotomy techniques and are well-prepared for their internship later. For that reason, this Phlebotomy Training Arm toolkit has been invented to give ample exposure and practice to the students. This phlebotomy training arm will also improve students' knowledge in the whole phlebotomy process so that it will be less nerve-wracking for them in the future. This Phlebotomy Training Arm helps university students practice venipuncture, arterial puncture and IV infusion conveniently at home. Besides, they save money from buying other expensive phlebotomy training models like those in Amazon as this Phlebotomy Training Arm uses inexpensive stuff that is found at home. There are obstacles and challenges faced by these university students who require a lot of practical sessions or face-to-face classes but are hindered by the limitations of Open and Distance Learning (ODL). Regardless of the challenges, there is still a way to ensure that students undergo laboratory sessions smoothly and effectively, especially for the phlebotomy course.

Keywords: Phlebotomy Training Arm toolkit, Medical Laboratory Technology students, model

PhlebVE21: A Smart Phlebotomy Training Arm Model

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



PhlebVE21: A smart phlebotomy training model **ABSTRACT**

- Phlebotomy is a skill required to draw blood from patients to be used for laboratory tests and disease diagnosis. It is a pre-requisite course for Diploma in Nursing, Medical Laboratory Technology and Bachelor of Medicine. During lab session, students used phlebotomy training model arm to practice phlebotomy.
- · However, students are unable to use facilities in the laboratory due pandemic and movement control order (MCO) restrictions. Teaching and learning have been conducted online. All students required to stay at home. Therefore, a phlebotomy training arm that is user-friendly and cost-effective which enable students to practice phlebotomy at home is in great demands.
- PhlebVE21 is a smart phlebotomy training model which could assist teaching and learning of phlebotomy course. It is made of fake blood depository, robust tubes, pumping mechanism that resembles humans' heart pumping system and could prevent bubble entrapment during training procedure. The smart valve and pump fulfilled the market niche which can prevent bubble entrapment inside tubes, thus ensure smooth phlebotomy trainings.
- The robustness, bubble prevention mechanism, user-friendly and cost-effectiveness of PhlebVE21 has high potential to attract students and educators of health sciences.

1.0 OBJECTIVES

- To help students be familiar with the anatomy of blood vessels, the feeling of blood vessels palpation and accuracy of needle insertion.
- To enhance student's skill and confidence before performing phlebotomy in real patients.
- To use for practice phlebotomy skills at home since students are unable to use facilities in the laboratory due to movement control order (MCO) restrictions.

2.0 ADVANTAGES



- backflowing and prevent bubble entrapment.
- Resembles human anatomy: the smart pump representing heartbeat, valve imitating heart valve and 3 tubes that representing 3 type of veins (basilic, median cubital and cephalic vein).
- Robust tubes: can withstand repeated punctures up to 1000 times without leakage.
- Enhance students' skill and confidence.

3.0 USEFULNESS



- PhlebVE21 is conducive for phlebotomy training.
- It provides an alternative in developing phlebotomy skill before working with real patients.
- The robust material of the tubes enabled more than 1000 times of needle insertion.
- It also has huge potential in assisting lectures during teaching and learning session.



- The existing phlebotomy training models are prone to develop bubble entrapment along the tube which interfere with aspiration of the fake blood through the syringe.
- PhlebVE21 is equipped with smart valve and pump which can prevent bubble entrapment inside tubes, thus ensure smooth phlebotomy trainings.
- This feature is the niche of our product and has never been introduced in the market.
- This phlebotomy training model is also easy to assemble and uncomplicated to use.

5.0 COMMERCIALISATION **POTENTIAL**

- Very competitive price: The cheapest in the market is costs more than RM500 per unit. Our price is expected to be around RM20 only.
- Very affordable price range for students.
- The smart valve and pump feature is capable to outbid the existing model in the market.
- Can be used as teaching and learning tool for diverse audience of health science and medical field.

6.0 INVENTORS



- 1. Siti Farizan Mansor
- 2. Muhammad Aqil Abbasy Bin Mohd Pudzi
- 3. Hasif Hamdani Bin Suhaimi
- 4. Muhammad Shazman Bin Baderol
- 5. Shafy Hilmy Bin Zainal Abu
- 6. Muhammad Hanif bin Ali

PhET Simulation as an Alternative for Hands-on Experiment (Predicting Molecular Shape)

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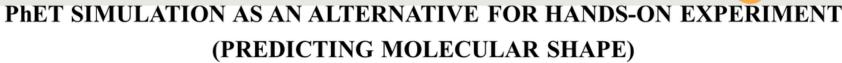
Abstract

COVID-19 pandemic changes our teaching method mainly from face to face to Online and Distance Learning (ODL). For courses that have laboratory sessions will be much affected because the lecturer must find an alternative way to ensure that sessions which should be hands-on can be executed through ODL while students can achieve their learning outcomes. For the Inorganic Chemistry course (CHM361), PhET Interactive Simulation was used to substitute the hands-on session for predicting molecular shape experiments. Through PhET Simulation, the experiment can be done successfully to achieve the experiment objectives and the course learning outcomes. Students show good understanding and great reporting results of this experiment with minimal error in predicting the molecular shape of a given molecule.

Keywords: Chemistry course (CHM361), PhET Interactive Simulation, experiment

PhET Simulation as an Alternative for Hands-on Experiment (Predicting Molecular Shape)





Fariesha Farha Ramli

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ABSTRACT

COVID-19 pandemic changes our teaching method mainly from face to face to Online and Distance Learning (ODL). For courses that has laboratory session will be much affected because lecturer must find the alternative way to ensure that session which should be hands-on can be executed through ODL while students can achieve their learning outcomes. For Inorganic Chemistry course (CHM361), PhET Interactive Simulation was used to substitute the hands-on session for predicting molecular shape experiments. Through PhET Simulation, the experiment can be done successfully to achieve the experiment objectives and the course learning outcomes. Students show good understanding and great reporting result of this experiment with minimal error in predicting the molecular shape of given molecule.

OBJECTIVES

The main objective of using PhET simulation is to replace the hands-on laboratory experience while students are in ODL environment. It is mainly to makes sure that the objectives of the experiment are achieve together with the learning outcomes. In additional, it also serves:

- To give quality ODL experiences
- To increase engagement of students with the laboratory session
- · To improve conceptual learning by providing explicit visual models

ADVANTAGES

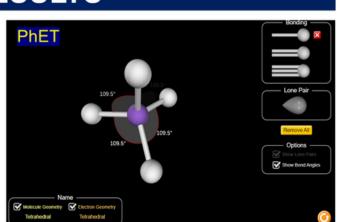
- Simulations over real equipment
- · Can be done repetitively
- Flexible in term of time
- No worries of breaking equipment
- Explore various molecules
- Interactive-3D structure
- Web based FreeUser friendly

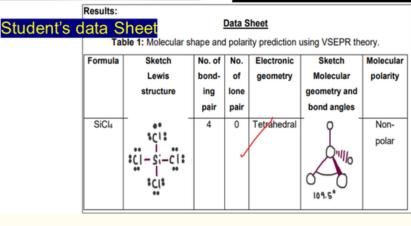
USEFULNESS

- Encourage self-learned
- Suitable as an alternative for hands-on
- Familiarise students with molecular geometry
- Great reporting result of the experiment
- Minimal error in predicting molecular shape of molecule

RESULTS







STUDENT'S FEEDBACKS



Match to the lab manual

Can achieve objectives of the experiment

Can try for many molecules

My Electronic Colloquium Guide & Assessment (My e-CGA)

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Abstract

Information and Communication Technology (ICT) plays an essential role in teaching and learning in the 21st Century. COVID 19 pandemic has expedited learning institutions to embrace ICT for teaching and learning purposes. All higher learning institutional have shifted to open and distance learning approaches since then. My e-CGA, which stands for My Electronic Colloquium Guide and Assessment, is a product innovated for teaching and learning in coping with COVID 19. The My e-CGA was developed for four purposes. Firstly, to provide a platform for students to defend their research proposals. Secondly, it is to encourage students to be serious and committed to completing their research proposal. Thirdly, to make sure students are ready to submit for Research Ethics Committee (REC) approval, and fourth is to instill research culture among students. My e-CGA is an alternative guide for students to refer for the completion of their research proposal and colloquium, which is part of the research journey for students. It is also an avenue for students to get quick guidance and assessment for excellent research proposals, producing quality research. Students can get information about research proposals at their convenience since the My e-CGA is a onestop website that provides all the necessary information. Assessment in My e-CGA is conducted through a colloquium program by lecturers who are experts in their fields and research methodology. My e-CGA can be easily replicated and duplicated. It can be easily used in other Universiti Teknologi MARA (UiTM) campuses or any other public or private higher learning institutions. The Faculty of Administrative Science and Policy Study of UiTM Cawangan Sabah and UiTM Cawangan Sarawak had used My e-CGA for collaboration purposes to assess their students' research proposals. My e-CGA has been registered with MyIPO for copyright.

Keywords: My e-CGA Interactive Simulation, research proposal and colloquium

My Electronic Colloquium Guide & Assessment (My e-CGA)



ABSTRACT

My e-CGA is an idea to embrace ICT for teaching and learning during the COVID-19 pandemic. Since physical distancing is essential in facing this pandemic, there needs to be a platform to conduct colloquium for research proposal defense among Bachelor Administrative Science (BAS) students virtually, and at the same time meeting COVID-19 SOPs.

1.0 OBJECTIVES



ØTo provide one stop website for quick guidance and assessment for excellent research proposals

ØTo guide students in completing their research for students to quick guidance and assessment for proposal and presenting it in colloquium to defend an excellent and quality research proposal. their research proposal.

ØTo encourage students to be more serious and proposal via virtual colloquium committed in completing their research proposal to ØSaving supervisors' time and avoid repeating produce a quality research proposal

ØTo make sure students are ready to submit their Research Ethic Committee (REC) Form for approval ØTo instill research culture among students

3.0 USEFULNESS



ØMeeting United Nation Sustainable Development Goals (UN SDGs) No. 3 on good health and well being society as it provides alternative to face-toface practices and meeting COVID-19 SOP particularly on social distancing

ØMeeting United Nation Sustainable Development Goals (UN SDGs) No. 4 in ensuring inclusive and equitable quality education

5.0 COMMERCIALISATION POTENTIAL

Very high commercialisation potential as My e-CGA can be easily replicated and duplicated by other faculties in UiTM, other UiTM Branch campuses, and other both public and private universities.

2.0 ADVANTAGES



ØOne stop resourceful website providing reference

ØA digital platform for student to defend their

themselves

4.0 NOVELTY



ØProvide clear guidelines and objective assessment for students producing quality research proposal ØProvide guidance for preparing students for colloquium

ØDigital platform for research proposal defense ØAllows collaboration in research proposal defense between and among UiTM branch campuses, public or/and private higher learning institutions, and local or/and international local institutions.

6.0 INVENTORS



ØJennifah Nordin UiTM Sabah ØElizabeth Caroline Augustine UiTM Sarawak **ØNur Afisha Binti Y**usuf UiTM Sarawak **ØChai Shin Yi UiTM Sarawak** ØDr Asri Bin Salleh UiTM Sabah ØSaiful Zizi Bin Jalil UiTM Sabah

KIT PDP MOMEN DAYA (Kit MODA)

Salmi Abdullah Rokayah A Rashid

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Abstract

Jarak daya yang betul dari pangsi (pivot) dan ketepatan penentuan arah momen adalah perlu bagi menghasilkan vektor momen daya yang efektif. Berdasarkan pemerhatian didapati tahap kefahaman pelajar terhadap teori momen daya adalah rendah kerana mereka seringkali gagal menentukan nilai momen daya dengan tepat. Ini disebabkan tahap keupayaan pelajar berimiginasi terhadap arah momen dan titik permulaan jarak dengan daya tindakan adalah lemah. Oleh itu, satu kaedah, iaitu Kit PdP Momen Daya (KIT-MODA) telah dibangunkan sebagai alat bantu mengajar (ABM) bagi memperlihatkan secara realiti hubungan daya tindakan dan jarak daya itu dari pangsi (pivot) adalah bersudut tepat. Kit PdP Momen Daya (KIT-MODA) adalah sistem rasuk dimana lebih dari satu daya normal dalam situasi arah daya yang sama atau arah daya yang bertentangan dikenakan. Daya yang bertindak secara bersudut tepat dengan jarak dari titik pangsi (pivot) akan menghasilkan momen daya. Arah pusingan momen samada ikut arah jam atau lawan arah jam akan terlakar diatas papan putih yang dipasang bersama dengan kit ini. Kaedah ini merupakan pembangunan inovasi yang menggunakan bahan yang terdiri dari Pine Wood Pallet (1 inci x I inci) , penyangkut , pemberat 250 g , pita pengukur, papan putih dan pen penanda. Keberkesanan Kit MODA telah dibuktikan melalui kajian tindakan menggunakan kaedah ujian pra dan ujian pos terhadap pelajar yang mengambil kursus sains kejuruteraan. Dapatan menunjukkan pelajar hanya mengambil masa yang sedikit untuk menyelesaikan masalah berkaitan dengan momen daya. Pelajar berjaya mengira nilai momen dengan tepat. Konsep momen daya telah dapat diketengahkan, pelajar lebih mudah menerima dan mengaplikasikan konsep tersebut dengan baik. Pelajar menyatakan kesesuaian dan keseronokan menggunakan Model Kit Moda.

Kata Kunci: Kit Moda, Momen daya, Arah Momen, Jarak, Kefahaman

KIT PDP MOMEN DAYA (Kit MODA)





ABSTRAK

Jarak daya yang betul dari pangsi (pivot) dan ketepatan penentuan arah momen adalah perlu bagi menghasilkan vektor momen daya yang efektif. Berdasarkan pemerhatian didapati tahap kefahaman pelajar terhadap teori momen daya adalah rendah kerana mereka seringkali gagal menentukan nilai momen daya dengan tepat. Ini disebabkan tahap keupayaan pelajar berimiginasi terhadap arah momen dan titik permulaan jarak dengan daya tindakan adalah lemah. Oleh itu, satu kaedah, iaitu Kit PdP Momen Daya (KIT-MODA) telah dibangunkan sebagai alat bantu mengajar (ABM) bagi memperlihatkan secara realiti hubungan daya tindakan dan jarak daya itu dari pangsi (fulkrum) adalah bersudut tepat. Kit PdP Momen Daya (KIT-MODA) adalah sistem rasuk dimana lebih dari satu daya normal dalam situasi arah daya yang sama atau arah daya yang bertentangan dikenakan. Daya yang bertindak secara bersudut tepat dengan jarak dari titik pangsi (fulkrum) akan menghasilkan momen daya. Arah pusingan momen samada ikut arah jam atau lawan arah jam akan terlakar diatas papan putih yang dipasang bersama dengan kit ini. Kaedah ini merupakan pembangunan inovasi yang menggunakan bahan yang terdiri dari Pine Wood Pallet (1 inci x I inci), penyangkut, pemberat 250 g, pita pengukur, papan putih dan pen penanda. Keberkesanan Kit MODA telah dibuktikan melalui kajian tindakan menggunakan kaedah ujian pra dan ujian pos terhadap pelajar yang mengambil kursus sains kejuruteraan. Dapatan menunjukkan pelajar hanya mengambil masa yang sedikit untuk menyelesaikan masalah berkaitan dengan momen daya. Pelajar berjaya mengira nilai momen dengan tepat. Konsep momen daya telah dapat diketengahkan, pelajar lebih mudah menerima dan mengaplikasikan konsep tersebut dengan baik. Pelajar menyatakan kesesuaian dan keseronokan menggunakan Model Kit Moda.

Kata kunci : Kit Moda, Momen daya, Arah Momen, Jarak , Kefahaman

1.0 OBJEKTIF

Membantu pelajar:

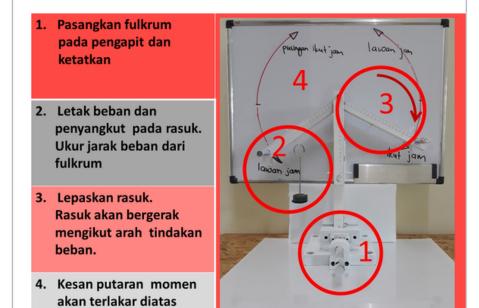
- i. Memahami konsep asas momen untuk menyelesaikan masalah momen daya
- Mengaplikasikan pengetahuan asas momen dalam aktiviti untuk menguasai konsep momen daya.

2.0 KELEBIHAN

Secara realiti :

- . Pelajar dapat mengenalpasti jarak sebenar yang patut diukur
- ii. Pelajar dapat melihat kesan putaran momen daya dengan jelas.

3.0 PENGUNAAN



5.0 POTENSI PENGKOMERSIALAN

papan putih

Boleh diaplikasikan dalam PdP bagi tajuk Momen Daya yang boleh diguna pakai oleh pelajar:









Online and Distance Learning (ODL) of Final Year Project Management: Contactless Engagement from Start to Finish

Mohd Izani Othman Suraya Sulaiman Mohd Nadzri Mohd Najib

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Abstract

Completing a final year project (FYP) is one of the graduation requirements for the Diploma in Pharmacy students. These students will undertake a research project during their hospital training placement in the sixth semester. Under normal conditions, students will meet with their potential supervisors at the end of their fourth semester prior to leaving for the hospital training (Phase 1). During these face-to-face meetings, they will discuss the planned tasks to complete the project with their respective supervisors. From this point onwards, the supervision will be conducted via online and distance learning (ODL) mode until completion (Phase 2). Presentation of their FYP findings is also a part of the assessment components of the FYP. The standard practice would require the students to return to the campus for a brief stay - present the findings and return home afterwards (Phase 3). Corrections of their FYP reports and submission of hardbound final reports to the faculty is done after that (Phase 4). The emergence of the coronavirus disease 2019 (COVID-19) has changed the approach to FYP management. Each phase (Phase 1 to 4) is now done remotely - without any physical contact. They start from setting up groups, assigning supervisors, the actual supervising, and monitoring the progress of FYP until completion. The contactless approach also sees that students are only required to submit soft copies of their reports. Likewise, the traditionally face-to-face oral presentations of the FYP findings are now conducted via online platforms such as Google Meet and Microsoft Team. Moreover, the usual hardbound copies of the FYP reports were no longer required. These changes have been well-adapted, proved to be successful, cost-effective and are here to stay.

Keywords: Final year project, management, report

Online and Distance Learning (ODL) of Final Year Project Management: Contactless Engagement from Start to Finish)





ONLINE AND DISTANCE LEARNING (ODL) OF FINAL YEAR PROJECT MANAGEMENT: CONTACTLESS ENGAGEMENT FROM START TO FINISH

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ABSTRACT

Completing final year project (FYP) is one of the graduation requirements for the Diploma in Pharmacy students. These students will undertake a research project during their hospital training placement in the sixth semester. Under normal conditions, students will meet with their potential supervisors at the end of their fourth semester prior to leaving for the hospital training (Phase 1). During these face-to-face meetings, they will discuss with their respective supervisors pertaining the planned tasks to complete the project. From this point onwards, the supervision will be conducted *via* online and distance learning (ODL) mode until completion (Phase 2). Presentation of their FYP findings is also a part of the assessment components of the FYP. The normal practice would require the students to return to the campus for a brief stay - present the findings and return home afterwards (Phase 3). Corrections of their FYP reports and submission of hard bound final reports to the faculty is done thereafter (Phase 4). The emergence of the coronavirus disease 2019 (COVID-19) has changed the approach to the FYP management. Each phase (Phase 1 to 4) is now done remotely - without any physical contact. Starting from setting up groups, assigning supervisors, the actual supervising, monitoring of the progress of FYP, up until completion. The contactless approach also sees that students are only required to submit soft copies of their reports. Likewise, the traditionally face-to-face oral presentations of the FYP findings are now conducted *via* online platforms such as Google Meet and Microsoft Team. Moreover, the usual hard bound copies of the FYP reports were no longer required. These changes have been well adapted, proved to be successful, cost-effective and are here to stay.

1.0 OBJECTIVES

To provide contactless engagement between supervisors and students on managing FYP by fully utilizing available online and digital platforms and services for:

- Supervisor-student communication, discussions and interactions
- Submission of FYP reports and presentation of research findings

2.0 ADVANTAGES

Convenient and Flexible

- Supervisors and students can mutually agree to discuss progress at any given time (online approach)
- Presentation done using online platforms at the convenience of students and supervisors

Cost-effective/savings

- Students only submit digital/soft copies of reports and presentation slides with no/minimal printing required
- Students remain at home/current location for presentation

Sustainable

- This method of engagement is preferred in the digital era
- Use of less paper, saves trees and environment friendly
 Space saving no hard bound reports to keep at office

3.0 USEFULNESS

Provide a great help for supervisors and students for managing FYP

- Communication done using instant messaging platforms and emails
- Submission of digital version of report can be done by one mouse click, any time, any where
- Presentation done through readily available video conferencing services

4.0 NOVELTY

Our approach provides comprehensive and integrated online and digital management of FYP from the starting of research project until completion.

5.0 COMMERCIALISATION POTENTIAL

This is an academic objective and is not aimed for immediate commercialization. However, this approach could be developed as web-based application as current FYP management has already adopted the online and digital approach.

6.0 INVENTORS



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Dr. Suraya Sulaiman Senior Lecturer



Dr. Mohd Nadzri Mohd Najib Senior Lecturer



McFACT GOT

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Abstract

Higher education institutions play an important role in preparing graduates to be professionally competent not only in their respective fields, but also as important role models and valuable society members. The postgraduate learning process is, however, challenging. Whilst postgraduate enrolment is increasing, the timely completion rates among postgraduates remain a problem. In the perspective of a master's degree, many students are grappling with completing their dissertation, causing postponements, interruptions, and inability to complete the master's degree on time. This is devastating since students and higher education institutions waste massive time, capital, and effort, and for the society, which loses out on highly skilled graduates. The Postgraduate Department at the Faculty of Accountancy, UiTM, confronts a similar challenge in graduating Master students on time. McFACT GOT was developed in response to the lack of monitoring mechanisms for student dissertation progress during their final semester. McFACT GOT is a tracking and monitoring system to assist students graduate from the Master by Coursework program on time (GOT). The McFACT GOT system is beneficial as it assists administrators to monitor whether students are achieving their dissertation timeline goals or whether the student is not progressing well. Furthermore, the monitoring system is useful because it helps administrators to plan educational activities in a timely manner, besides improving two-way communication between administrators and students. As such, students' academic progress is closely monitored and interventions such as mentoring, or counselling will be taken if progress lags. McFACT GOT is proven effective as shown by the progressive increase of GOT rate over the four recent semesters, i.e., Semester 20184: 59%, Semester 20192: 62%, Semester 20194: 73%, Semester 20202: 86%. It is thus in the best interest of the government, higher education institutions and communities to have students participating in graduate programmes obtain their master's degrees in a timely manner.

Keywords: McFACT GOT, graduates, Faculty of Accountancy

McFACT GOT





ABSTRACT

Higher education institutions play an important role in preparing graduates to be professionally competent not only in their respective fields, but also as important role models and valuable society members. The postgraduate learning process is, however, challenging. Whilst postgraduate enrolment is increasing, the timely completion rates among postgraduates remain a problem. In the perspective of a Master degree, many students are grappling with completing their dissertation, causing postponements, interruptions, and inability to complete the Master degree on time. This is devastating since students and higher education institutions waste a massive amount of time, capital, and effort, and for the society, which loses out on highly-skilled graduates. The Postgraduate Department at the Faculty of Accountancy, UiTM, has a similar challenge in graduating Master students on time. Essentially, there is no established system in place to monitor student's dissertation progress throughout the three months alloted in their final semester.

1.0 OBJECTIVE

It is our objective to develop a tracking and monitoring model, i.e. McFACT GOT, to ensure that students complete their research dissertation within the alloted three months timeframe, thus assuring they graduate on time (GOT) from the Master by Coursework program.

Phase 1: Kick off Dissertation Briefing Phase 3 Students attend Module 1 Students submit Dissertation Logbook Phase 3 Student submit Dissertation Logbook Phase 3 Student submit Dissertation Logbook Phase 4 Student submit Dissertation Via whatsapp group Sharing of supporting materials Student submit Dissertation Logbook Submission!! Student submit Dissertation ON TIME

2.0 ADVANTAGE

McFACT GOT serves as a tracking/monitoring mechanism that assists administrators to oversee whether students are achieving their academic goals or whether the student is not progressing well. McFACT GOT is beneficial as it helps the administrators to plan ahead educational activities every semester, besides improving two-way communication between the administrator and the students throughout the phases. The academic progress of the students is closely monitored and measures such as mentoring or counseling will be taken if progress is lagged behind.

McFACT GOT comprises 4 phases, each of which constitutes a single Module.

3.0 USEFULNESS

<u>Phase 1</u>: Students are being briefed on the do's and don't's of doing a dissertation and tips for effective dissertation completion.

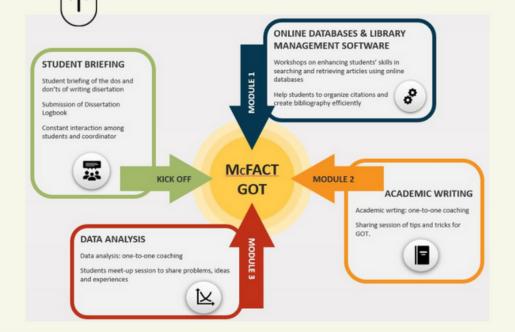
<u>Phase 2</u>: The conduct of "Module 1" – an online database workshop to expose students on how to search for articles, research materials and do citations and references the right and fast way.

<u>Phase 3</u>: The conduct of "Module 2" – academic writing workshop, being a one-to-one coaching session between students and the facilitator. Students are guided on how to manage time, kept motivated, and do academic writing the right way and efficiently.

Phase 4: The conduct of Module 3" – a data analysis workshop, being

<u>Phase 4</u>: The conduct of Module 3" – a data analysis workshop, being a one-to-one coaching session between students and facilitator. Students are guided on how to organize and manage data, analyze data using the right statistical test, and interpret results.

**Constant interaction via WhatsApp group, sharing of research materials, and submission of Dissertation Logbook in each of the 4 phases.



4.0 NOVELTY

Whilst studies have been examining the determinants of students graduating on time, this project differs in a way that it contributes by proposing a monitoring model that oversees Master students' dissertation research progress, hence ensuring graduation on time. The McFACT GOT model is also useful and applicable to postgraduate schools in other Malaysian universities in the attempt to ensure that students graduate within the stipulated period of their postgraduate studies



5.0 COMMERCIALISATION POTENTIAL

McFACT GOT is proven effective with the progressive increase of the overall GOT rate for each Master program at the Faculty of Accountancy over the past four recent semesters, i.e. Semester 20184: 59%, Semester 20192: 62%, Semester 20194: 73%, Semester 20202: 86%. Individual student tracking and monitoring through McFACT GOT is beneficial for all postgraduate schools in public and private universities, even more now that all higher education institutions in Malaysia are moving toward Graduate on Time (GoT) in Postgraduate programs.

Inventors

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Effective Data Driven Approach in Teaching Microwave Engineering Subject

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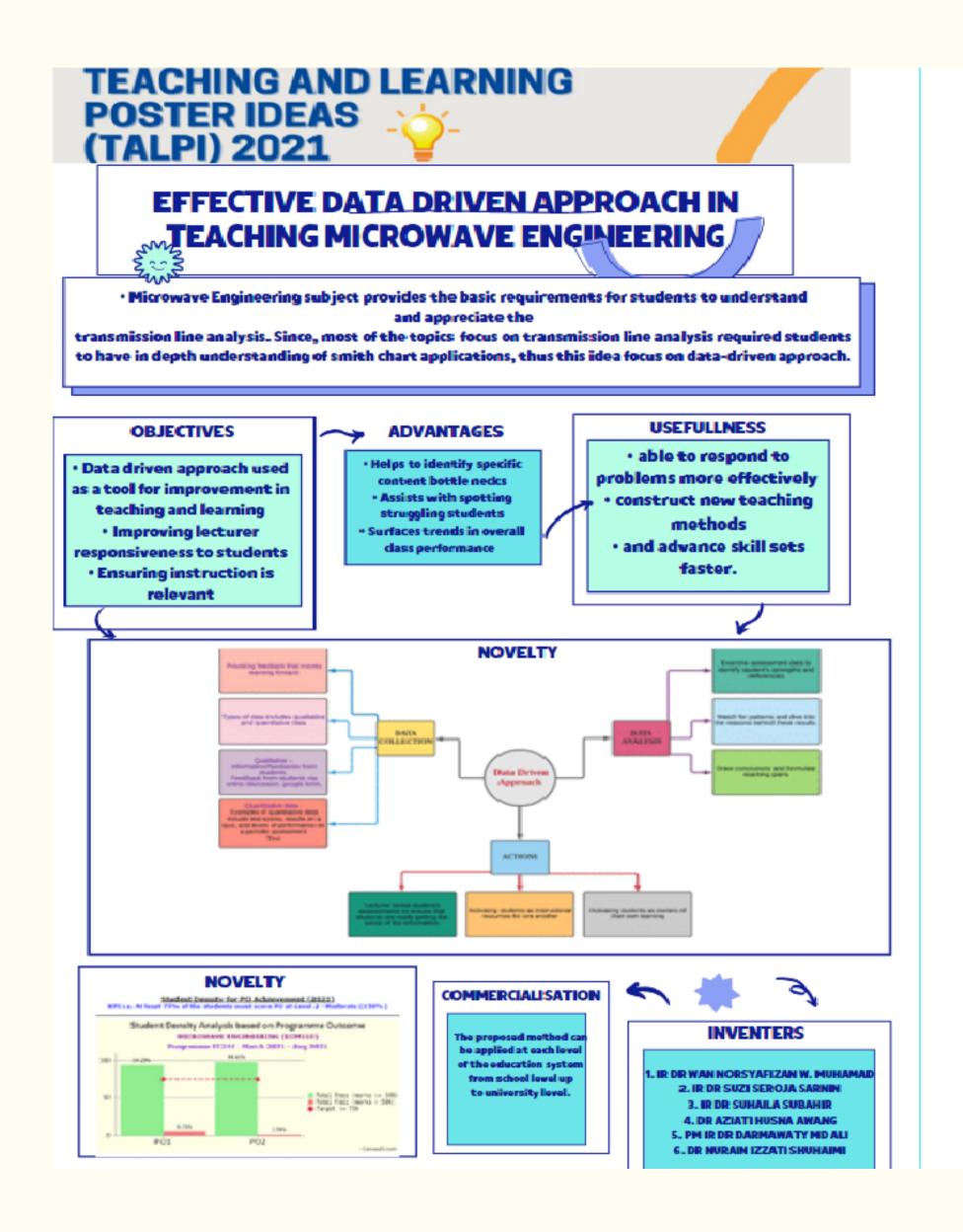
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Abstract

Microwave Engineering subject course provides the basic requirements for students to understand and appreciate the transmission line analysis, waveguide and microwave radio system. Since most of the topics in Microwave engineering subject focus on transmission line analysis, which requires students to have an in-depth understanding of smith chart applications, thus this paper focus on data driven approach in order to improve student performance and motivate students towards the subject. The data-driven approach is a method that gives attention or makes decisions based on students' feedback. In other words, students' responses are included in the evaluation processes. Information gathered from students is essential for a data-driven approach as this is used as a tool for improvement. Lecturers are making decisions based on analysis or in-depth evaluation based on the information gathered from their students. From the assessment, measurements, and feedback from students, lecturers are able to analyse strengths and weaknesses for specific parts of the course and take practical actions to overcome the problem. There are three main components involved in a data-driven approach: an appropriate assessment, accurate measurements, and in-depth evaluation. Creating valid and reliable assessments is critical to accurately measuring educational data. However, evaluating the information gathered is equally important to the effective use of the information for instruction. Assessment is a method or tool that is used to evaluate and measure the learning progress, skills acquisition or educational needs of students. Measurement refers to the use of assessments and the analysis of data such as scores obtained from the assessments to infer students' abilities and proficiencies. Evaluation is the process of using the measurements gathered in the assessments. Data-driven instruction, using accurate measurements, appropriate assessments, and in-depth evaluation, is changing the way we view tests and instruction and how we communicate information to students.

Keywords: Microwave Engineering, students, data-driven approach

Effective Data Driven Approach in Teaching Microwave Engineering Subject



The Two-Device Self-Proctoring Asynchronous Approach: Towards Fairness of Online Assessment

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Abstract

The pandemic has seen most tertiary level assessments utilised online platforms. The assessment component also moved to the virtual approach. Recent disciplinary cases reported (internal data) suggest that the pressure to provide the best answer during an online exam has tempted the students to violate their respective pledges, which is based on the honour system and does not guarantee fairness. Whilst live proctoring an online exam may improve fairness, the logistics of monitoring over 100 students can be overwhelming. The limitation is magnified for units or faculty with a few staff and without proper technical support. A combination between the honour system and proctoring, i.e., selfproctoring, is seen as the solution to overcome these issues. Our version of self-proctoring requires two separate devices, i.e., a smartphone and a computer or tablet, in tandem. The smartphone is being used to record the real-time situation during a test/exam. The quality of the video needs to be set to the standard definition (SD) resolution (< 480p) to ensure sufficient phone storage for recording. The computer or tablet screen will be recorded via Google meet or any screen recorder software during an online test or exam. The software approach will reduce internet usage as it allows for offline recording. Therefore, the internet load is only coming from the test platforms. This self-proctoring asynchronous approach can help students adjust their own time as the test can be taken at any time. Adaptation to the self-proctoring approach for online exams/tests has seen drastic changes in students' overall achievement. Answers to the test questions are now more reflective of the knowledge and language capabilities of the students. The current method is dynamic and adaptable to the ever-changing circumstances for each students' issues.

Keywords: Self-Proctoring Asynchronous Approach, honour system, proctoring

The Two-Device Self-Proctoring Asynchronous Approach: Towards Fairness of Online Assessment





THE TWO-DEVICE SELF-PROCTORING ASYNCHRONOUS APPROACH: TOWARDS FAIRNESS OF ONLINE ASSESSMENT

Mohd Nadzri Mohd Najib, Nursyuhada Azzman, Mohd Izani Othman, Suraya Sulaiman Faculty of Pharmacy, University Teknologi MARA Cawangan Pulau Pinang, Kampus Bertam, 13200 Pulau Pinang, Malaysia

ABSTRACT

The pandemic has seen most tertiary students' engagement moved online. The assessment component also moved to the virtual approach. Recent disciplinary cases reported (internal data) suggest that the pressure to provide the best answer during an online exam has tempted the students to violate their respective pledges, which is based on the honour system and does not guarantee fairness. Whilst proctoring an online exam may improve fairness, the logistics of monitoring over 100 students can be overwhelming. The limitation is magnified for units or faculty with a small number of staff and without proper technical support. To overcome these issues, a combination between the honour system and proctoring i.e. self-proctoring, is seen as the solution. Our version of self-proctoring requires the use of two separate devices i.e. a smartphone and a computer/tablet in tandem. The smartphone is being used to record the real-time situation during a test or an exam. To ensure sufficient phone storage for recording, the quality of the video needs to be set to the standard definition (SD) resolution (< 480p). During the online test or exam, the screen of the computer or tablet will be recorded via Google meet or any screen recorder software. The software approach will reduce the internet usage as it allows for offline recording. Therefore, the internet load is only coming from the test platforms. By doing this self-proctoring asynchronous approach, it can help students to adjust their own time as the test can be taken at any time. Adaptation to the self-proctoring approach for online exams/tests has seen drastic changes to the overall achievement of students. Answers to the test questions are now more reflective of the knowledge and language capabilities of the students. The current method is dynamic, and adaptable to the ever-changing circumstances for each students' issues.

1.0 OBJECTIVES

The main objectives of this innovation are to:

- 1.improve fairness during online test/exam
- 2.manage the logistics of monitoring large group in one common test/exam
- 3. Optimizing readily available gadgets for the process

4.0 NOVELTY

The two-device self-proctoring asynchronous approach is an optimized version of the live proctoring method. This approach allows for better management of large size, common exam/test.

2.0 ADVANTAGES

The main advantages of this innovation are:

Fairness

• Improve fairness during online test/exam

Logistics

• Able to monitor large group in one common test/exam

Convenient

Optimizing readily available gadgets for the process

Flexible

 Though time is limited as per normal test/exam, student is allowed to start the assessment at anytime during which the test duration is open.

3.0 USEFULNESS

The innovation helps:

- 1.the educators improve fairness during online test/exam which is crucial with online distance learning.
- 2.the students proof their honesty during test/exam if accused of cheating as the whole session is recorded.
- 3. gauge the students' knowledge reflective of their understanding of the subject matter in an online and distance learning.
- 4. oversee the whole exam process remotely.
- 5. selective monitoring if needed.

5.0 COMMERCIALISATION POTENTIAL

This was an academic goal with no immediate commercial potential; however, this teaching strategy can be applied into various micro credential and open learning courses.

6.0 INVENTORS







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BioAct e-Module Liveworksheet : Pengukuhan Santai Norma Baharu

Azlyawaty Harun, Rosmah Yahya Nor Azilawani Jaafar Nor Maizura Harun

Kolej Matrikulasi Kelantan

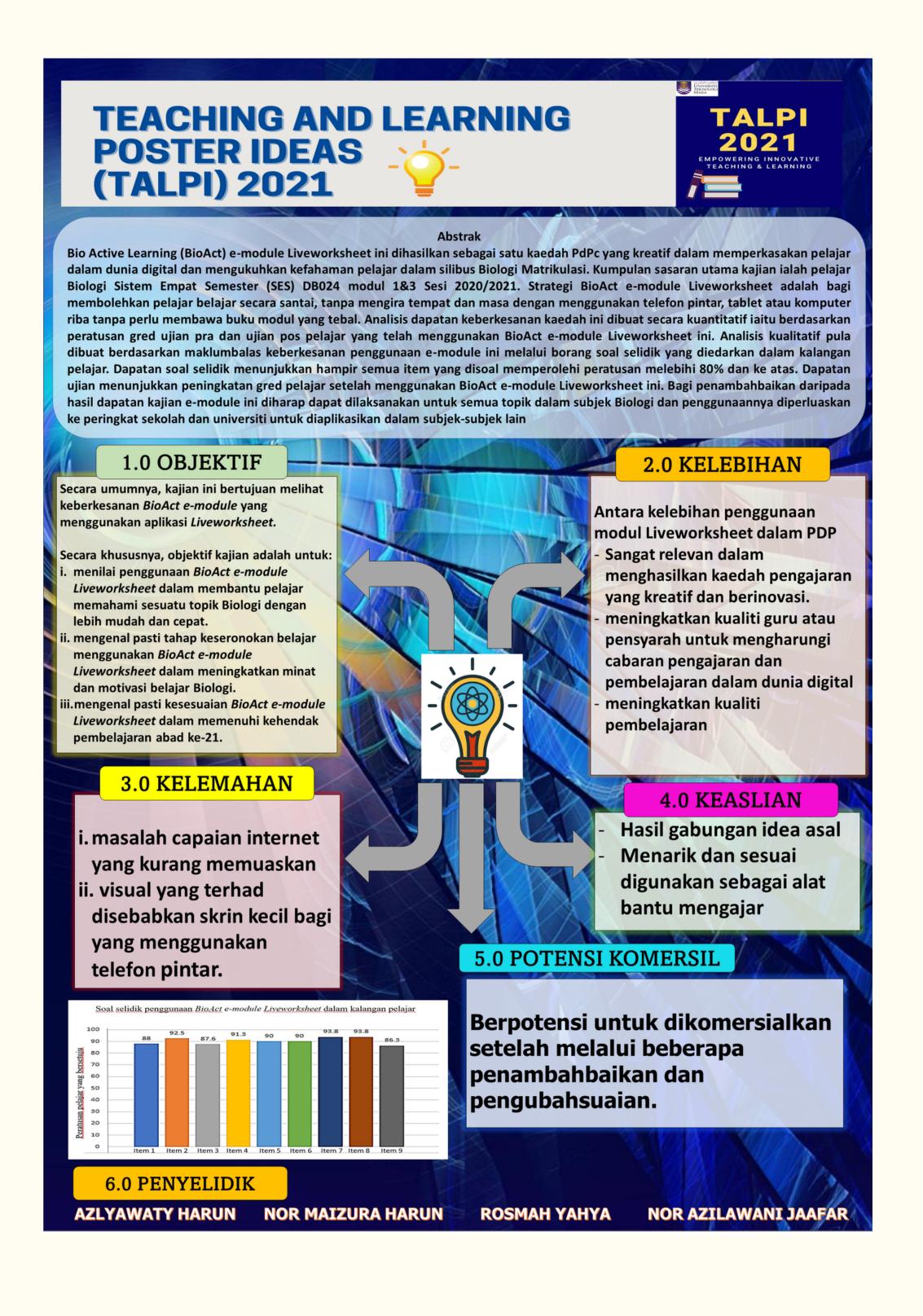
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Abstrak

BioActive Learning (BioAct) e-Module Liveworksheet ini dihasilkan sebagai satu kaedah PdPc yang kreatif dalam memperkasakan pelajar dalam dunia digital. Secara umumnya, BioAct e-Module Liveworksheet ini diharapkan dapat membantu mengukuhkan kefahaman pelajar yang melibatkan topik dalam silibus Biologi di peringkat matrikulasi. Kumpulan sasaran utama kajian ialah pelajar Biologi Sistem Empat Semester (SES) DB024 modul 1&3 Sesi 2020/2021. Strategi BioAct e-Module Liveworksheet adalah bagi membolehkan pelajar belajar secara santai, tanpa mengira tempat dan masa dengan menggunakan telefon pintar, tablet atau komputer riba tanpa perlu membawa buku modul yang tebal. Melalui BioAct e-Module Liveworksheet, para pelajar diminta melengkapkan modul pembelajaran secara digital melalui aplikasi Liveworksheet. Modul yang dihasilkan menggunakan aplikasi Liveworksheet lebih menarik perhatian kerana menampilkan peta konsep dan gambarajah yang berwarna-warni serta tidak membosankan. Analisis dapatan keberkesanan kaedah ini dibuat secara kuantitatif iaitu berdasarkan peratusan gred ujian pra dan ujian pos pelajar yang telah menggunakan BioAct e-Module Liveworksheet ini. Analisis kualitatif pula dibuat berdasarkan maklum balas keberkesanan penggunaan e-module ini melalui borang soal selidik yang diedarkan dalam kalangan pelajar. Dapatan soal selidik menunjukkan hampir semua item yang disoal memperolehi peratusan melebihi 80% dan ke atas. Dapatan ujian menunjukkan peningkatan gred pelajar setelah menggunakan BioAct e-Module Liveworksheet ini. Bagi penambahbaikan hasil dapatan kajian, e-module ini diharap dapat dilaksanakan untuk semua topik dalam subjek Biologi dan penggunaannya diperluaskan ke peringkat sekolah dan universiti untuk diaplikasikan dalam subjek-subjek lain Justeru itu, semoga BioAct e-Module Liveworksheet boleh menjadi platform terbaik dalam membantu mengukuhkan kefahaman pelajar dan pada masa yang sama berjaya menghasilkan pensyarah yang mahir dalam menyediakan PdPc secara kreatif dengan aplikasi digital.

Kata Kunci:BioAct e-Module Liveworksheet, modul pembelajaran, silibus biologi, dunia digital.

BioAct e-Module Liveworksheet: Pengukuhan Santai Norma Baharu



BID4ME: Conceptualizing Freelance Job Platform for Students

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Abstract

The Digital Workforce (UBM599) course examines developing trends in the digital workplace through a crowdsourcing platform. This course aims to expose students to experience as a freelancer to develop their digital skills. Students are required to find work using crowdsourcing platforms and respond to freelancer job postings to earn money. A platform is an essential element for a student to place a bid on an online platform. However, rapid changes in the features and terms of the online platform are challenging for students to apply and bid for an online job. In the most popular platforms available, many scammer issues and the untrusted job had caused many student constraints, such as waste of time and loss of money. This project aims to conceptually design on developing an independent platform called "Bid4Me", whereby students may apply for a freelance job offered by internal clients (e.g., the project offered by lecturers and administration). The Bid@Me platform will act as a one-stop centre as a start-up for students to be involved as a digital workforce by offering their digital skills and expertise and generating self-income. At the same time, the platform will be helpful for lecturers/administrative to offer any online job such as research assistant/graphic design with a minimal payment fee. This platform is trusted to be the first initiative towards empowering the digital workforce among students, and it is believed that the platform could promote growth, development and application in all colleges and universities.

Keywords: BID4ME, The Digital Workforce (UBM599), job one-stop centre, digital skills

BID4ME: Conceptualizing Freelance Job Platform for Students



FIGEE Card: Inovasi Pengajaran bagi Kumpulan Berfungsi dalam Alam Kimia Organik

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Abstract

Figee Card ialah nota maya yang memaparkan objek tiga dimensi (3D) dan animasi menggunakan konsep Augmented Reality (AR) yang dibina untuk membantu pelajar memahami dan mengingati kumpulan berfungsi dalam kimia organik. Inovasi Figee Card yang dibina ini menyokong pembelajaran digital berpusatkan pelajar di era pandemik Covid-19. Figee Card dapat meningkatkan kemahiran mengenalpasti kumpulan berfungsi dalam topik Introduction to Organic Chemistry. Selain itu, Figee Card juga dapat mengatasi masalah mengenalpasti kumpulan berfungsi dalam kimia organik. Novelti yang terdapat dalam Figee Card ialah kad imbasan yang pertama kali diperkenalkan di kolej-kolej matrikulasi yang menggunakan konsep Augmented Reality dan ia mematuhi sukatan mata pelajaran di matrikulasi. Kajian kepuasan pengguna yang menumpukan kepada keberkesanan penggunaan Figee Card mendapati interprestasi skor min keseluruhan daripada soal selidik adalah 4.39 ± 0.16. Ini menunjukkan persepsi kepuasan pelajar terhadap penggunaan Figee Card sebagai bahan pembelajaran digital pada tahap yang sangat tinggi kerana ia telah meningkatkan kemahiran mengingat dan mengenalpasti kumpulan berfungsi dengan mudah, menarik dan interaktif. Secara keseluruhan, Figee Card mudah digunakan, berkesan dalam mengingati kumpulan berfungsi, efisien dan mempunyai nilai tambah yang berpotensi untuk dikomersialkan. Figee Card adalah inovasi yang menyokong pembelajaran digital bagi meningkatkan kecemerlangan pelajar walaupun pengajaran dan pembelajaran dijalankan secara atas talian.

Kata Kunci: Figee Card, Augmented Reality, e-Flash Card

FIGEE Card: Inovasi Pengajaran bagi Kumpulan Berfungsi dalam Alam Kimia Organik



e-GeoGraph: Interactive Learning in Graph Sketching

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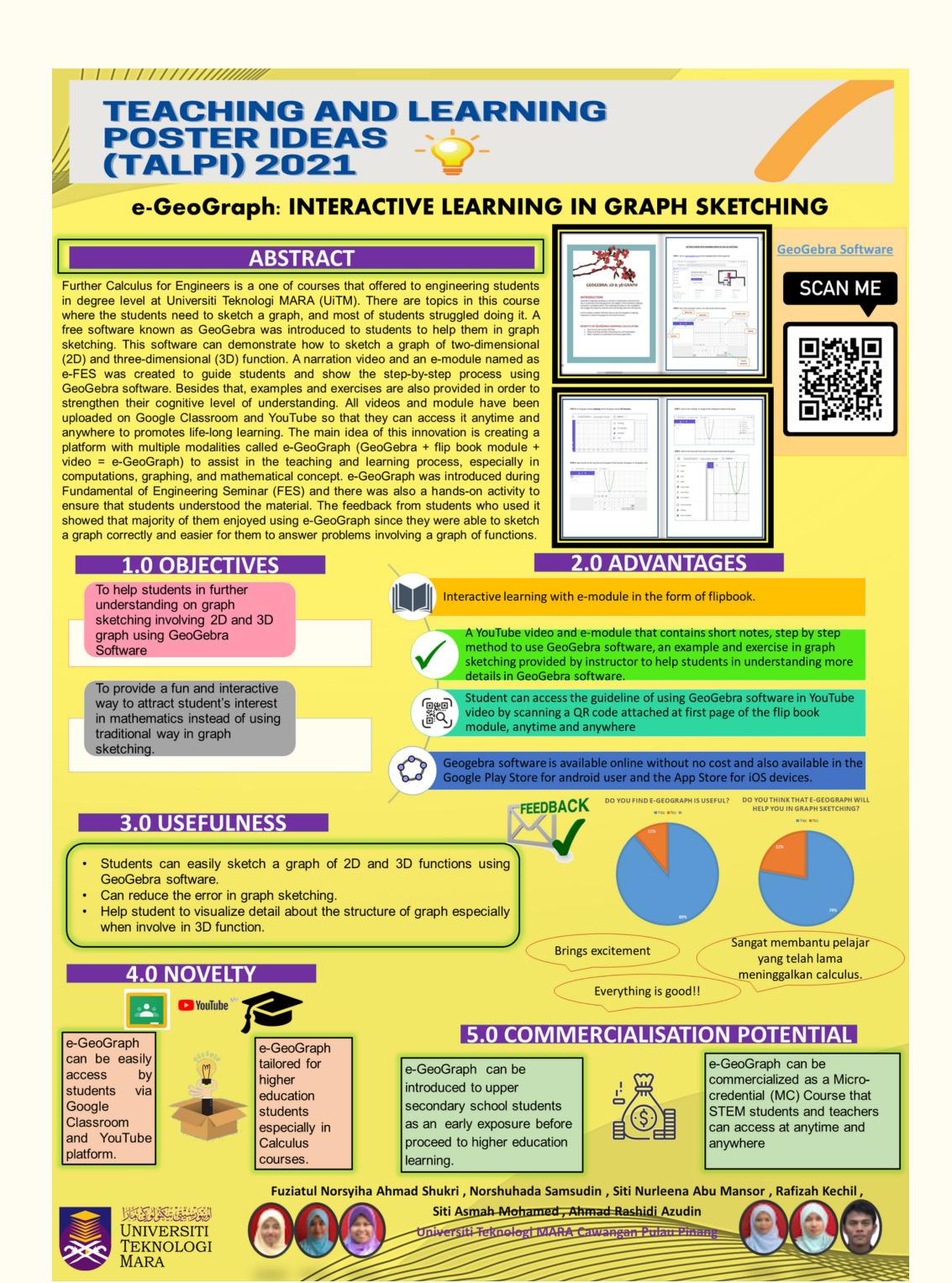
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Abstract

The global impact of the Covid-19 pandemic involved every industry around the world, including the education sector. Due to this, social education changed from face-to-face to online distance learning (ODL) to avoid huge crowds and prevent the virus from spreading. However, teaching and learning have some challenges, especially for students taking mathematics subjects involving graphical functions. Further, Calculus for Engineers is one of the courses offered to engineering students at the degree level at Universiti Teknologi MARA (UiTM). There are topics in this course where the students need to sketch a graph, and most of the students struggle to do it. A free software known as GeoGebra was introduced to students to help them in graph sketching. This software can demonstrate how to sketch a twodimensional (2D) and three-dimensional (3D) graph. A narration video and an e-module named e-FES was created to guide students and show the step-by-step process using GeoGebra software. Besides that, examples and exercises are also provided in order to strengthen their cognitive level of understanding. All videos and modules have been uploaded on Google Classroom and YouTube so that they can access them anytime and anywhere to promote lifelong learning. The main idea of this innovation is to create a platform with multiple modalities called e-GeoGraph (GeoGebra + flipbook module + video = e-GeoGraph) to assist in the teaching and learning process, especially in computations, graphing, and mathematical concepts. e-GeoGraph was introduced during the Fundamentals of Engineering Seminar (FES), and there was also a hands-on activity to ensure that students understood the material. The feedback from students who used it showed that most of them enjoyed using it since they could sketch a graph correctly, and it was easier for them to answer problems involving a graph of functions.

Keywords: e-GeoGraph, three-dimensional (3D) graph, Calculus for Engineers

e-GeoGraph: Interactive Learning in Graph Sketching



Final Year Project Management System Using Canvas LMS

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Abstract

The aim of this project is to reduce hassles and time taken to process submissions and evaluations of Final Year Project (FYP) using Canvas, a free open source learning management system (LMS). The FYP which called Undergraduate Project (HTM655) is a mandatory course for final year students of Faculty of Hotel and Tourism Management, Universiti Teknologi MARA. The FYP is very tedious and error prone task especially when assigning the project manually; simply because it involves lots of parties like FYP Coordinator, supervisors, and students. Currently, the faculty does not employ any specific system to facilitate tasks dealing with FYP, much work done manually. Despite the fact that the FYP is supported by a course management system comparable to that used for other courses at the university, it is not well adapted for project which required multiple assessors. Thus, there is a need to find a comprehensive system which can support tasks effectively. Canvas is a software application system with comprehensive functionalities. The system is useful for FYP Coordinator to create a course and post learning resources online. FYP supervisors can post an online course whether for fully online instruction or to complement face-to-face courses. Canvas allows the students' fast and convenient access to grades, homework, lectures, messaging, course, calendars and much more. With Canvas, FYP coordinator, supervisors and internal examiners can add graded assessments and manage a lot of the course administrative functions such as tracking documenting and reporting student activities. On top of that, importantly Canvas has feature many software out there do not equip with; that is moderated grading function in which very important for FYP Coordinator. Canvas allows FYP Coordinator, supervisors and internal examiners manage resources effectively and interact with students, thus indirectly improve student learning outcomes.

Keywords: Final Year Project (FYP), canvas, undergraduate

Final Year Project Management System Using Canvas LMS

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



ABSTRACT

The aim of this project is to reduce hassles and time taken to process submissions and evaluations of Final Year Project (FYP) using Canvas, a free open source learning management system (LMS) software. FYP is very tedious and error prone task especially when assigning the project manually; simply because it involves lots of parties like FYP Coordinator, supervisors, and students. Currently, the faculty does not employ any specific system to facilitate tasks dealing with FYP so, much work done manually. Thus, there is a need to find a comprehensive system which can support tasks effectively. Canvas is a software application system with comprehensive functionalities. The system is useful for FYP Coordinator to create a course and post learning resources online. FYP supervisors can post an online course whether for fully online instruction or to complement face-to-face courses. Canvas allows the students' fast and convenient access to grades, homework, lectures, messaging, course, calendars and much more. With Canvas, FYP coordinator, supervisors and internal examiners can add graded assessments and manage a lot of the course administrative functions such as tracking documenting and reporting student activities. On top of that, importantly Canvas has feature many software out there do not equip with; that is moderated grading function in which very important for FYP Coordinator. Canvas allows FYP Coordinator, supervisors and internal examiners manage resources effectively and interact with students, thus indirectly improve student learning outcomes.

1.0 OBJECTIVES

FYP Management System using Canvas:

- 1. To reduce workload of FYP coordinator.
- 2. To provide convenience for supervisor and students throughout the process of FYP in one platform
- 3. To facilitate assessment required for multiple examiners which current university LMS does not support.

2.0 ADVANTAGES

- Reduce workload
- Convenience
- Prompt feedback
- · Grading anywhere anytime

3.0 USEFULNESS

- Able to setup students' group
- Enhances communication between supervisors and students
- Easy access to work progress
- · Allow parallel grading

4.0 NOVELTY

- A free project management system
- Significance innovation as compared to traditional FYP management process

5.0 COMMERCIALISATION POTENTIAL

A preliminary study (survey) was conducted on users (5 assessors and 15 students) to evaluate the system. The results shown majority of users were positive in terms of ease of use and specific functions. Furthermore, over 70% believe the system is convenient and willing to switch to the system.

6.0 INVENTORS

- 1. Mashita binti Abdul Jabar
- 2. Shahira binti Abdul Jabar
- 3. Mohd Shafik bin Abdul Jabar
- 4. Zaity Akhtar binti Mukhtar
- 5. Rosdiana binti Abdul Razak
- Nik Rozilaini binti Wan Mohamed

T-BEAT: Building Elements Anatomy

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Abstract

Augmented Reality (AR) is a technology that superimposes digital content and information into the physical world. AR enables interactivity due to its fundamental functions that merge real and virtual worlds, provide real-time interaction and display 3D objects. This technology has enormous potential in the teaching and learning environment as it enables students to experience real events virtually. AR also integrates information and forwards it directly to the users. Many educational institutions were closed due to the Covid-19. Therefore, most of the teaching and learning activities took place online. Building Works Measurement (BWM) is a major in quantity surveying education. In order to take out quantity of work, it is important for students to have good visualization skills to interpret the blueprint. However, many students expressed annoyance at the difficulty of understanding their lessons while studying online. Therefore, an augmented reality called T-Beat (Building Elements Anatomy) was developed to help students better understand building elements and improve the visualization of 2D drawings. Three (3) types of software that were used to develop the T-Beat were Floor Plan Creator, Unity, and Vuforia. Upon completion, students can view 3D objects with building and construction information that can be scanned using smartphones, tablets, or other suitable devices. The 3D object that emerged was linked to a targeted 2D drawing. Positive comments were received from students after using the T-beat. The use of the T-Beat includes the improved visualization of 2D drawings, the provision of information about the elements of a building, the basic rules of quantity measurement and the construction technology for the associated building elements. The T-BEAT also allows students to learn at their own pace.

Keywords: 2D, 3D, Augmented Reality, Building Works Measurement, Elements

T-BEAT: Building Elements Anatomy

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



ABSTRACT

Augmented Reality (AR) is a technology that superimposes digital content and information into the physical world. AR enables interactivity due to its fundamental functions that merge real and virtual worlds, provide real-time interaction and display 3D objects. This technology has enormous potential in the teaching and learning environment as it enables students to experience real events virtually. AR also integrates information and forwards it directly to the users. Many educational institutions were closed due to the Covid-19. Therefore, most of the teaching and learning activities took place online. Building Works Measurement (BWM) is a major in quantity surveying education. In order to take out quantity of work, it is important for students to have good visualization skills to interpret the blueprint. However, many students expressed annoyance at the difficulty of understanding their lessons while studying online. Therefore, an augmented reality called T-Beat (Building Elements Anatomy) was developed to help students better understand building elements and improve the visualization of 2D drawings. Three (3) types of software that were used to develop the T-Beat were Floor Plan Creator, Unity, and Vuforia. Upon completion, students can view 3D objects with building and construction information that can be scanned using smartphones, tablets, or other suitable devices. The 3D object that emerged was linked to a targeted 2D drawing. Positive comments were received from students after using the T-beat. The use of the T-Beat include the improved visualization of 2D drawings, the provision of information about the elements of a building, the basic rules of quantity measurement and the construction technology for the associated building elements. The T-BEAT also allows students to learn at their own pace.

1.0 OBJECTIVES

- To help students better understand building elements
- ii. To improve the visualization of 2D drawings.

3.0 USEFULNESS

- ☐ T-Beat allows students to explore the elements of a building, how to measure the quantity
- ☐ It help students to better describe and understand building elements

5.0 COMMERCIALISATION POTENTIAL

- ☐ Educators, Polytechnic students, and Higher Institution students, especially to the quantity surveying students—the building of elements through Augmented Reality
- ☐ It can be adapted for technical courses offered in educational institutions such as construction management, engineering, and others

2.0 ADVANTAGES

- Enhance students cognitive, psychomotor
- Can be access anywhere and anytime either during the online or offline class.
- ☐ Reasonable cost

4.0 NOVELTY

- ☐ T-Beat developed by using a combination of four (3) software which were Floor Plan Creator, Unity and Vuforia
- ☐ Students can view 3D objects with building and construction information that can be scanned using smartphones, tablets, or other suitable devices.
- ☐ The 3D object that emerged was linked to a targeted 2D drawing.

6.0 INVENTORS



HARYATI

ISMAIL





NURUL ASHIKIN MOHD SHUHAIMI

Hybrid Systematic Manual Approach

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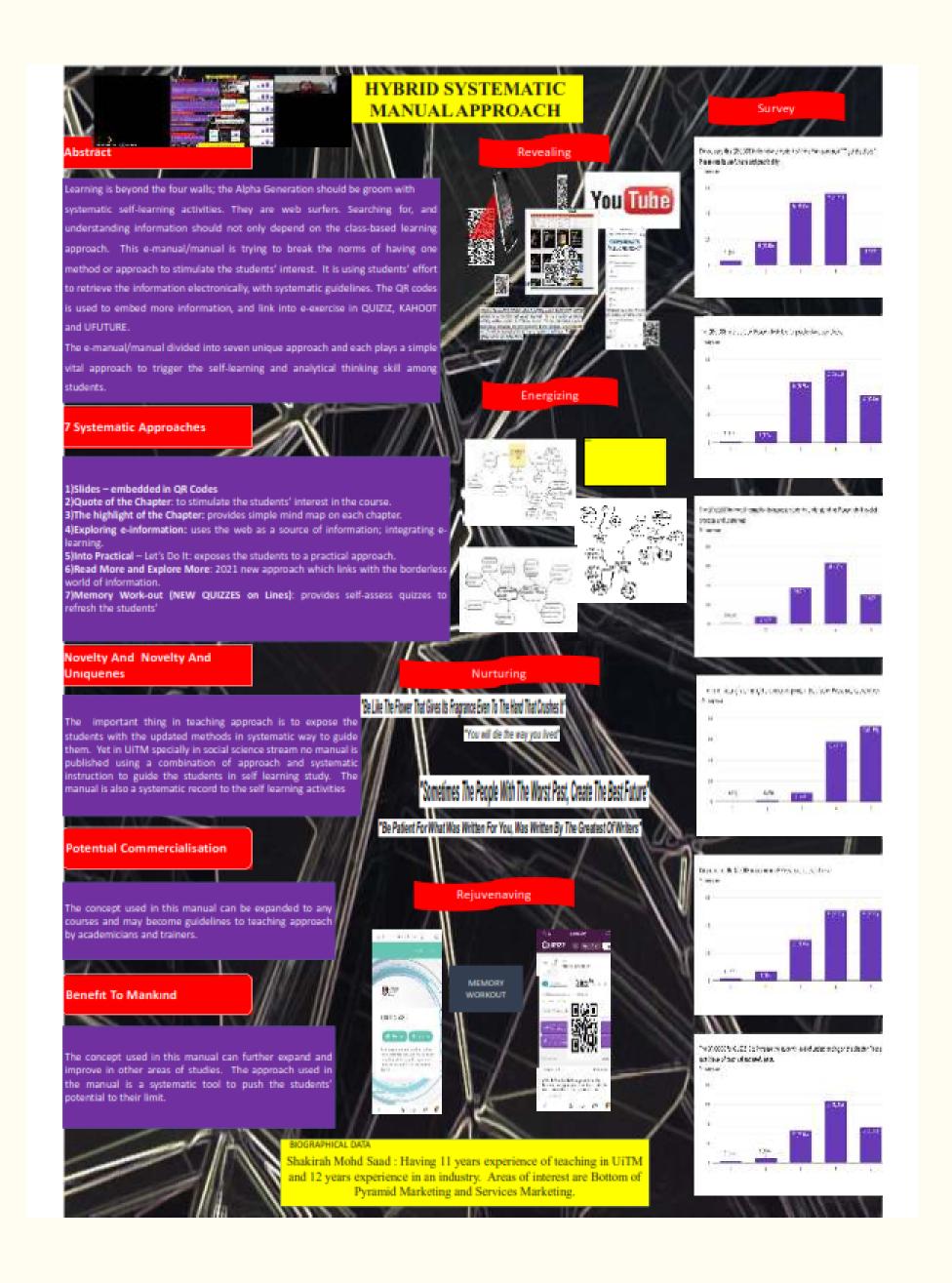
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Abstract

Learning is beyond the four walls; the Alpha Generation should be groom with systematic self-learning activities. They are web surfers. Searching for, and understanding information should not only depend on the class-based learning approach. This e-manual/manual is trying to break the norms of having one method or approach to stimulate the students' interest. It is using students' effort to retrieve the information electronically, with systematic guidelines. The QR codes is used to embed more information, and link into e-exercise in QUIZIZ, KAHOOT and UFUTURE. The e-manual/manual divided into five areas and each area play a simple vital approach to trigger the self-learning and analytical thinking skill among students. Yet in UiTM especially in the social science stream, no e-manual/manual is published using a combination of e-learning approach and systematic instruction to guides the students in self-learning study. This manual is also a systematic record of the self-learning activities. The concept used in this manual can further expand and improve in other areas of study.

Keywords: Ujian Alpha Generation, Student-Centred, Manual, Self Learning

Hybrid Systematic Manual Approach



Developing Self-Confidence & Critical Thinking Through Debate: An Action Research Study

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Abstract

Impeccable memory is a desire by most students and academicians. Mastery of memory retention comes with many techniques. This project is an application which is called "Spaced Repetition 101". The project introduces a combination of spaced repetition technique within digital applications to gather and review learning materials in the subject of occupational therapy in paediatric conditions. Spaced repetition is extremely effective in improving longterm memory recall compared to other methods such as rote learning and cramming prior to exams. There are three tabs in the app. Tab one is about the introduction. Tab two is about five WH-questions (what, why, where, when, who) and how to use the app. Tab three is about testing the effectiveness of the technique and collecting feedback regarding the app. This application was tested by over 40 students of Diploma in Occupational Therapy. First, the students were briefed and guided on the way of using the app. Next, students were given 8 pages of reading material consisting of descriptions and pictures on topics about autism spectrum disorder. Then, the students applied spaced repetition technique. Lastly, they were given a link to a five questions quiz regarding the topic and feedback regarding the app. Results: There was a significant improvement in the level of understanding about the technique and paediatric condition. It is about 60% of the respondents displayed having very good knowledge after using the app. More than 80% of respondents answered the quiz correctly after applying spaced repetition technique. This app has vast benefits and commercialisation potential for learners especially for students of occupational therapy or health sciences programs. This app helps the students to memorize many paediatric conditions to be successful healthcare workers. For the time being, this app is free for anyone and only takes a tiny space to be installed on a mobile phone, tablet or laptop.

Keywords: Critical thinking, debate, Self-confidence, student-centred, teaching innovation

Developing Self-Confidence & Critical Thinking Through Debate: An Action Research Study

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021





Developing Self-Confidence & Critical Thinking through Debate: An Action Research Study on Dental Students

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Abstract

Self-confidence and critical thinking are important skills for students who are studying to become doctors as their job requires them to be able to communicate well to patients as well as thinking critically whilst providing treatment. The aim of this small-scale action research study was to promote self-confidence and critical thinking amongst first year preclinical dental students via weekly student-centred classroom parliamentary debates.

Context & Participants

Participants were 30 First Year UiTM dental students who were in their first semester. Students enrolled in our 9-week elective "Introduction to Debate" class. The first 3 weeks was an introductory class on public speaking and parliamentary style debating. The remainder 6 weeks were student-centred classroom parliamentary debates.

- 1. THBT social media is the best way to connect with people.
- 2. THBT Television is the best tool for child's development.
- 3. THBT single sex schools more effective than co-ed schools.
- 4. THBT prostitution should be legalised.
- 5. THBT college education is a must for building a successful career in the future.
- 6. THBT zoos should be abolished.

Figure 1. The 6 debate motions chosen.

The Research Action

- Announcement of the motion of the day.
- 2 30 minutes preparing session within their own respective sides.
- 70 minutes debate. Each speaker had a time limit of 10 minutes for delivery. Each side was then allowed 5 minutes for concluding remarks.
- 4 30 minutes discussion and reflection at the end of the class.

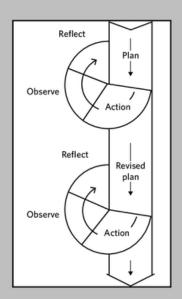


Figure 2. Kemmis and McTaggart action research model

Data Collection

- 1. A students perception survey at the start and end of the semester.
- 2. A researcher journal on observations and reflections throughout the semester.
- 3. Classroom artefacts including pictures and recordings.

Key Findings

- 1. Throughout the semester, student participation and confidence increased positively.
- 2. Students' speech were more eloquent as they became comfortable speaking in front of an audience.
- 3. Students were able to understand the motion, think critically and form concrete arguments
- 4. Students developed empathy towards views that doesn't necessarily agree with their own beliefs.







Novelty and Advantages

This is the first-time the Faculty of Dentistry, UiTM has introduced a speech and debating class for first year dental students. Students finished the semester with a higher degree of self-confidence, critical thinking capability, empathy and understanding for others with different beliefs, and ability to speak with conviction when needed.

Conclusion

In an informal classroom setting, parliamentary style debating was seen to increase student self-confidence and critical thinking. The faculty will continue to organise debating classes for students to increase self-confidence and critical thinking to empower the countries future dentists.

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Internet Muamalat Learning (I-MULA)

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Abstract

Self-confidence and critical thinking are important skills for first year students to learn early in their journey of tertiary education. These skills are paramount for students who are studying to become doctors as their job requires them to be able to communicate well to patients as well as thinking critically whilst providing treatment. Training preclinical students to be able to hold their arguments and perspectives with confidence and practice openmindedness in analysing differences in opinions is crucial in preparing them for the job market. The aim of this small scale action research study was to promote self-confidence and critical thinking in first year preclinical dental students via 6 weekly student-centred classroom parliamentary debates. In this study, first year preclinical dental students were introduced to parliamentary style debating and public speaking in general in a 9-week semester course. In the last 6 weeks, students were divided into 2 groups to debate a chosen motion. The debate motion was given during the class to ensure that all students did not prepare prior to the class. Students were given 30 minutes prior to the debate to discuss the motion according to their parliamentary sides. The debate was conducted after the discussion in an informal classroom setting. A pre and post student survey was given before and after the semester to analyse class effectiveness. Student's performances were analysed after each class, and improvements were implemented in the following class accordingly. Classroom participation and atmosphere were chosen as success criteria for this study. Throughout the semester, student participation and confidence increased positively. They were more eloquent, and their arguments were more concrete and structured. The pre and post student survey reported positive overall remarks. In conclusion, in an informal classroom setting, parliamentary style debating was seen to increase student self-confidence and critical thinking.

Keywords: Muamalat, Continuous Learning, Islamic Banking App, Learning Apps

Internet Muamalat Learning (I-MULA)



TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021

Teknologi

INTERNET MUAMALAT LEARNING (I-MULa)

Project Members: Afifah Binti Azmi, Aemy Bin Aziz, Masitah Binti Omar, Hadenan Bin Towpek (Dr.) & Mohd Zuhaili Bin Kamal Basir. Universiti Teknologi MARA (UiTM), Cawangan Sarawak



INTRODUCTION

Current education system trends have opened up many spaces for innovation and technology in the education system in Malaysia. Needs and facilities in the education system have become a priority in educational institutions in Malaysia so that students are not left behind in the required education. Recognizing the need, lecturers from Universiti Teknologi MARA (UiTM) Sarawak branch have provided a learning platform in the form of an application known as INTERNET MUAMALAT LEARNING (I-MULa) to students under their supervision. Through this digital education platform that has been provided, students can access information related to their studies via smartphone only and can access all the information related to the study without having to go to campus or to the library.

OBJECTIVE

- 1. Providing a new platform in research through mobile phone applications.
- 2. Materials, discussions, notes, information, exercises can be conducted without having to meet.

NOVELTY

- 1. Restricted learning mediums have prevented the face -to -face learning process and caused reading and exercise materials to not be provided.
- One of the new mediums of virtual learning and self -learning through the provision of learning materials, notes and exercises for the use of students.

USEFULNESS

- 1. Provide complete notes and reading materials to students.
- 2. Islamic Muamalat and banking notes are provided completely through the distribution of chapters.
- 3. Students can conduct lectures and training by online.

ADVANTAGES

- Students can get study materials, exercises and notes only through apps on smart phones.
- 2. Students can conduct studies and self -review without the need for face -to -face meetings with lecturers.

POTENTIAL COMMERCIALIZATION

This application is suitable for use by all students in the stream of banking, economic studies, muamalat and business. Can also be used by the public to obtain information related to muamalat and economy in Islam.



SAMPLE APPLICATION I-MULa





MENU 1: KAMUS PERBANKAN DAN MUAMALAT







QARDUL HASSAN

MURABAHAH

MENU 2: LATIHAN DAN KUIZ



MENU 3: MODUS OPERANDI MUAMALAT

MENU 4: KAEDAH SEBUTAN ARAB



MENU 5: DALIL PENSYARIATAN AKAD MUAMALAT

Nota Fizik Interaktif

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Abstrak

Nota Fizik Interaktif merupakan buku nota ringkas Fizik yang diaplikasikan secara offline menggunakan kaedah penerbitan elektronik (ePUB). Nota ini merangkumi topik Momentum and Impulse yang diajar di peringkat matrikulasi bagi subjek Fizik. Idea inovasi nota ringkas ini dihasilkan dengan menggabungkan beberapa elemen interaktif multimedia serta helaian nota seperti buku digital yang lebih menarik dan tidak perlu dimuat turun berulangkali. Menerusi kaedah lama, pelajar hanya membaca nota dalam bentuk pdf yang tiada ciri-ciri interaktif. Ini agak membosankan kerana ia seakan membaca nota pada helaian kertas biasa. Dengan terhasilnya Nota Fizik Interaktif, konsep-konsep Fizik yang dipelajari lebih mudah difahami, menyeronokkan dan merangsang minat pelajar untuk belajar sendiri. Untuk menggunakan Nota Interaktif Fizik, pelajar hanya perlu memuat turun ePub reader melalui AppStore atau PlayStore. Pengguna iOs boleh membaca Nota Interaktif Fizik ini menerusi aplikasi tersedia Books, manakala pengguna Android pula boleh menggunakan aplikasi Lithium.

Kata Kunci: nota interaktif, Fizik, multimedia

Nota Fizik Interaktif

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NOTA FIZIK INTERAKTIF



Nota Fizik Interaktif merupakan buku nota ringkas Fizik yang diaplikasikan secara offline menggunakan kaedah penerbitan elektronik (ePUB). Nota ini merangkumi topik Momentum and Impulse yang diajar di peringkat matrikulasi bagi subjek Fizik. Idea inovasi nota ringkas ini dihasilkan dengan menggabungkan beberapa elemen interaktif multimedia serta helaian nota seperti buku digital yang lebih menarik dan tidak perlu dimuat turun berulang kali. Menerusi kaedah lama, pelajar hanya membaca nota dalam bentuk pdf yang tiada ciri-ciri interaktif. Ini agak membosankan kerana ia seakan membaca nota pada helaian kertas biasa. Dengan terhasilnya Nota Fizik Interaktif, konsepkonsep Fizik yang dipelajari lebih mudah difahami, menyeronokkan dan merangsang minat pelajar untuk belajar sendiri. Untuk menggunakan Nota Interaktif Fizik, pelajar hanya perlu memuat turun ePub reader melalui AppStore atau PlayStore. Pengguna iOs boleh membaca Nota Interaktif Fizik ini menerusi aplikasi tersedia Books, manakala pengguna Android pula boleh menggunakan aplikasi Lithium.



OBJEKTIF

- · Bantu kefahaman pelajar dalam topik Momentum and impulse
- Rangsang minat untuk belajar subjek Fizik menerusi elemen interaktif
- Bantu pelajar dalam pembelajaran kendiri



- Unsur multimedia seperti animasi, audio dan video
- · Pilihan untuk mendengar audio atau tidak
- Perlu dimuat turun sekali sahaja dan mudah diakses
- Pelajar dapat membuat carian spesifik



KEBERGUNAAN

- Mudah alih
- · Bahan bantu belajar
- Tiada risiko hilang atau rosak
- Dalam bentuk digital, mudah dipindahkan



KELEBIHAN

- Ringkas, padat, berserta peta minda dan jadual
- Dapat digunakan dengan pelbagai peranti
- · Pengalaman belajar lebih menyeronokkan berbanding kaedah tradisional
- Penerangan berserta animasi memudahkan pemahaman sesuatu konsep fizik



REKABENTUK

- Teks
- Audio, video, animasi
- Peta minda
- Jadual
- Zoom



POTENSI KOMERSIAL

- Pensyarah Matrikulasi seluruh Malaysia
- Bahan pembelajaran kendiri bagi pelajar



PEREKACIPTA

PUAN SHIQAH BINTI EBRAHIM Pensyarah Fizik

Chemistry Consultation Service During Pandemic Era

Elmi Sharlina Md Suhaimi Mohd Rosli Mat Yazid Siti Afiza Hj Basir Khadijah Abdullah Muhammad Seman Badrisam Saindin

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Abstract

During this pandemic era, teaching and learning could only be conducted online. Student consultation sessions should also be held online. Students will use the Whatsapp or Telegram applications to ask questions. Students are usually embarrassed to ask, talk, and comment on Whatsapp or Telegram groups. This causes students to personally ask the lecturer. There are some of the same questions asked by some students repeatedly. If students ask personally, only students who ask will get the information or answers they want. To solve this problem, a site or wall known as Chemistry Consultation Service is built for students to ask questions. Students are asked to ask at least one question on the wall and a group of lecturers will answer the questions asked by students. This Chemistry Consultation Service is built using the Padlet application in the DELIMA Portal. After this wall is built, students need to join the wall through the link provided. Students were asked to ask questions about chemistry using the wall during a student consultation session with the lecturer. The advantage of this wall of chemistry consultation service is that it has become a reference point for solving chemical-related problems. Students are not ashamed to ask because the name of the person asking does not appear on the wall unless students write their name. Lecturers can collaborate with other lecturers in the same unit in helping students solve misunderstandings in chemistry subjects. Lecturers can also monitor students' involvement and performance in solving problems, tasks assigned and can assess students' achievement. In addition, it can also build healthy relationships and competition when students get to know each other using pictures. Students also collaborated with each other by sharing ideas to provide a mind map in strengthening knowledge and understanding on the subject of chemistry during this pandemic outbreak. Although students have never met physically, their motivation can be strengthened with the existence of this wall of Chemistry Consultation Service.

Keyword: Chemistry Consultation Service, Padlet

Chemistry Consultation Service During Pandemic Era

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021

TALPI43B

CHEMISTRY CONSULTATION SERVICE DURING PANDEMIC ERA

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During this pandemic era, teaching and learning could only be conducted online. Student consultation sessions should also be held online. Students will use the Whatsapp or Telegram app to ask questions. Students are usually embarrassed to ask, talk, and comment in Whatsapp groups or Telegram groups. This causes students to personally ask the lecturer. There are some of the same questions asked by some students repeatedly. If students ask personally, only students who ask will get the information or answers they want. To solve this problem, the lecturer has built a site or wall to ask questions known as Chemistry Consultation Service. Students are asked to ask at least one question on the wall and a group of lecturers will answer the questions asked by students. This Chemistry Consultation Service is built using the Padlet application in the DELIMA Portal. After this wall is built, students need to join the wall through the link provided. Students were asked to ask questions about chemistry using the wall during a student consultation session with the lecturer. The advantage of this wall of chemistry consultation service is that it has become a reference point for solving chemical-related problems. Students are not ashamed to ask because the name of the person asking does not appear on the wall unless students write their name. Lecturers can collaborate with other lecturers in the same unit in helping students solve misunderstandings in chemistry subjects. Lecturers can also monitor student involvement as well as know students' performance in solving problems, tasks assigned and can assess student achievement. In addition, it can also build healthy relationships and competition when students get to know each other using pictures. Students also collaborated with each other by sharing ideas to provide a mind map in strengthening knowledge and understanding in the subject of chemistry during this pandemic outbreak. Although students have never met, student motivation can be strengthened with the existence of this wall of Chemistry Consultation Service.

Keyword: Chemistry Consultation Service, Padlet

4.0 NOVELTY

This Chemistry Consultation Service was firstly used as introducing tools and consultation session between students and lecturer when only online classes can be conducted.

1.0 OBJECTIVES

✓ The Chemistry Consutation Service was intended to conduct online teaching and learning consultation sessions during the Covid-19 pandemic era.

Students' perception and satisfaction with the use of Chemistry Consultation Service (CCS)



Mean

2.0 ADVANTAGES

- Students build healthy relationships and competition.
- Strengthening knowledge, understanding and motivation.
- Student can collaborate with each other by sharing ideas.
- Lecturer can collaborate each other in helping students solve misunderstanding about subjects.

3.0 USEFULNESS

- ✓ Chemistry Consultation Service has become a reference point for solving chemical-related problems.
- Q&A session with collaborations with other students & lecturers.
- ✓ Lecturers can be used to monitor student involvement and performance.
- Students can introduce themselves, sharing opinion and knowledge.
- Discussion between student with lecturer guidance.
- ✓ During orientation week, introducing sessions between friends and lecturers can be held.

0 INVENTO

5.0 COMMERCIALISATIO **POTENTIAL**

✓ Chemistry Consultation Service can be used in school, matriculation and university as well as other subjects so that students and lecturer/teacher can communicate easily during online classes.













The Digital Sway Based Organic Chemistry Module

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Abstract

Organic chemistry is one of the sections in the chemistry subject that has nine topics and is taught during the second semester of matriculation. These topics in organic chemistry require in-depth research and require experience in writing chemical equations as well as determining appropriate reactions to determine the resulting product, reagents used, appropriate chemical testing, and how to synthesize a substance using appropriate reactions. The digital organic chemistry module is built using the "Sway" application in Microsoft 365. This digital module is built to make it easier for lecturers and students to use it either during face-to-face teaching and learning time, during online teaching and learning, or as additional training to improve understanding and ability to remember chemical reactions. This study aims to determine the students' perception of the use of this digital module at Kelantan Matriculation College during online learning. Descriptive analysis using SPSS version 26 software was used in this study. This digital organic chemistry module is expected to attract students because of its more attractive display, easy access, and encouraging students to increase understanding through online learning and discussion either with friends or lecturers. Overall, the use of this digital organic chemistry module has helped lecturers and students while working/studying from home during the Covid-19 pandemic outbreak.

Keywords: Sway, Organic Chemistry Module, Digital

The Digital Sway Based Organic Chemistry Module

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021

TALPI44B

THE DIGITAL SWAY BASED ORGANIC CHEMISTRY MODULE

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ABSTRACT

Organic chemistry is one of the sections in the chemistry subject that has nine topics and is taught during the second semester of matriculation. These topics in organic chemistry require in-depth research and require experience in writing chemical equations as well as determining appropriate reactions to determine the resulting product, reagents used, appropriate chemical testing and how to synthesize a substance using appropriate reactions. The digital organic chemistry module is built using the sway application in Microsoft 365. This digital module is built to make it easier for lecturers and students to use it either during face-to-face teaching and learning time, during online teaching and learning or as additional training to improve understanding and ability to remember chemical reactions. This study aims to determine the students' perception of the use of this digital module at Kelantan Matriculation College during online learning. Descriptive analysis using SPSS version 26 software was used in this study. This digital organic chemistry module is expected to attract students because of its more attractive display, easy access and encourage students to increase understanding through online learning and discussion either with friends or lecturers. Overall, the use of this digital organic chemistry module has helped lecturers and students while working/studying from home during the Covid-19 pandemic outbreak.

Keywords: Sway, Organic Chemistry Module, Digital

4.0 NOVELTY

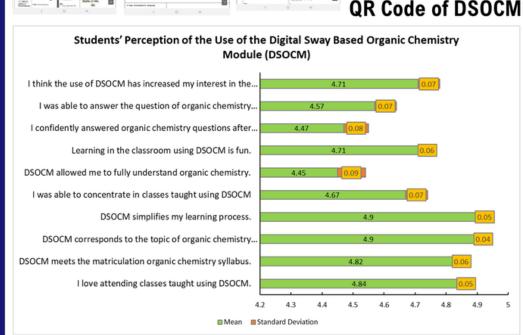
The sway -based organic chemistry module was first developed based on the matriculation syllabus and is easy to use as it is interactive.











1.0 OBJECTIVES

This study aims to determine the students' perception of the use of this digital sway organic chemistry module at Kelantan Matriculation College during online learning.

2.0 ADVANTAGES

This digital organic chemistry module is expected to attract students because of its more attractive display, easy access and encourage students to increase understanding through online learning and discussion either with friends or lecturers.

3.0 USEFULNESS

The use of this digital organic chemistry module has helped lecturers and students while working/studying from home during the Covid-19 pandemic outbreak. Digital Sway Organic Chemistry Module can be used as teaching and learning aids during class session, self learning or revision.

5.0 COMMERCIALISATION POTENTIAL

Digital Sway Organic Chemistry Module (DSOCM) has the potential to be commercialized and widely used at the school, matriculation and university levels.

6.0 INVENTORS



BINTI ABD GHANI



PN NURUI

AZWA BINTI

NASIRUDDIN



PN SITI ESAH





PN JULIANAWATI BINTI AHMED SHARLINA BINTI MD SUHAIMI

Students' Perception of Quality and Satisfaction in Digital Learning at Kelantan Matriculation College

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Abstract

This study aims to identify students' perceptions of quality and satisfaction in digital learning at Kelantan Matriculation College on online learning applied by lecturers based on demographic variables, teaching quality factors that contribute to student satisfaction and key teaching quality factors that influence student satisfaction. The population in this study consisted of 1391 Two Semester System (SDS) students and 490 Four Semester System (SES) students of Kelantan Matriculation College. A total of 317 respondents among students answered 30 items of the questionnaire provided through Google Form. Data were obtained, processed, and analyzed using IBM SPSS Statistics Version 26 software using pilot study instrument reliability index tests, frequency analysis, descriptive and correlation. This study uses the theoretical framework developed by Aman R. R. (2009) with some modifications based on 7 important elements namely infrastructure and learning support in college, learning objectives, assessment and measurement, the interaction between lecturers and students, online course technology and overall student satisfaction. The results of the study are categorized into student satisfaction and digital learning quality factors that affect student satisfaction at Kelantan Matriculation College. This study is expected to provide some input on the quality of learning and be a contributor to the improvements that will always be made so that digital learning is carried out more efficiently.

Keywords: Quality, Perception, Satisfaction, Digital Learning

Students' Perception of Quality and Satisfaction in Digital **Learning at Kelantan Matriculation College**



TALPI45B

STUDENTS' PERCEPTION OF QUALITY AND SATISFACTION IN DIGITAL LEARNING AT KELANTAN MATRICULATION COLLEGE

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ABSTRACT

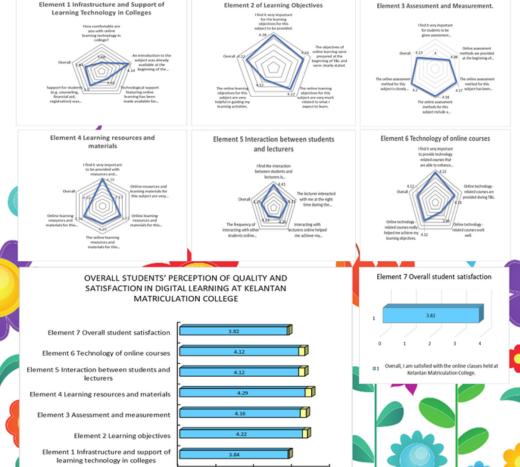
During the Covid-19 pandemic, Kelantan Matriculation College has conducted fully online learning for the first time. This study aims to identify students' perceptions of quality and satisfaction in digital learning at Kelantan Matriculation College on online learning applied by lecturers based on demographic variables, teaching quality factors that contribute to student satisfaction and key teaching quality factors that influence student satisfaction. The population in this study consisted of 1391 Two Semester System (SDS) students and 490 Four Semester System (SES) students of Kelantan Matriculation College. A total of 317 respondents among students answered 30 items of the questionnaire provided through Google Form. Data were obtained, processed and analyzed using IBM SPSS Statistics Version 26 software using pilot study instrument reliability index tests, frequency analysis, descriptive, and correlation. This study uses the theoretical framework developed by Aman R. R. (2009) with some modifications based on 7 important elements namely infrastructure and learning support in college, learning objectives, assessment and measurement, interaction between lecturers and students, online course technology and overall student satisfaction. The results of the study are categorized into student satisfaction and digital learning quality factors that affect student satisfaction at Kelantan Matriculation College. This study is expected to provide some input on the quality of learning and be a contributor to the improvements that will always be made so that digital learning is carried out more efficiently.

Keywords: Quality, Perception, Satisfaction, Digital Learning

4.0 NOVELTY

This study was first undertaken during the Covid-19 pandemic outbreak, when all teaching and learning was conducted totally

The overall mean score for Elements 1 to 7 shows that students' perception of quality and satisfaction with digital learning in Kelantan Matriculation College is at a high level with an overall mean of 4.08 and a standard deviation of 0.10. The average time and online classes conducted by the lecturers to each student was 7.58 hours per day.



1.0 OBJECTIVES

This study aims to identify students' perceptions of quality and satisfaction in digital learning at Kelantan Matriculation College on online learning applied by lecturers based on demographic variables, teaching quality factors that contribute to student satisfaction and key teaching quality factors that influence student satisfaction.

2.0 ADVANTAGES

This online digital learning is important in helping student learning, especially during the Covid-19 pandemic, when physical face-toface learning is limited.

3.0 USEFULNESS

The findings of this study can be used to plan for the implementation of online teaching and learning in the next semester. The findings of this study can potentially be used to improve online teaching and learning materials and methodologies.

5.0 POTENTIAL

Overall, this research has the potential to improve teaching and learning while also providing guidelines for completing the online eaching and learning process.

6.0 INVENTORS



DR ELMI SHARLINA

EN SAIFUL AKRAMIN SITI ESAH BINTI BIN MHD NOR



BIN AB RAHMAN

Quran Puzzle

Syukurriah Idrus
Aini Qamariah Mohd Yusof
Ain Syuhada Aniss Bukharee
Iffa Syasya Shazli
Mimi Nur Syazlien Mohtar
Nurul Izzah Rosli

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Abstract

Al-Quran puzzle gives a lot of consequences for people, society and the economy. Quran Puzzle is different from the ordinary puzzle that we can find in the market. This product contains puzzles from Surah from the Holy Al-Quran. It has a lot of specialty and uniqueness in one puzzle game. We can choose either easy, medium, or hard levels from the instruction note. This game can improve the recitation of the Al-Quran, the correct order of the verses in the Al-Quran and correct tajweed. In addition, it can reduce the number of people who are poor in mastering tajweed to minimize mistakes while reading the Quran. Besides, it also can improve memory and train the brain to memorize Al-Quran well. As we know, Quranic verses provide cognitive intelligence for anyone who masters Quranic skills. Children will also become accustomed to words that are often mentioned in the Al-Quran. When the words are learned, the puzzles can be used to test recall speed and accuracy. It will encourage thousands of children all over the world to understand and familiarize themselves with the Holy Quran's commonly used phrases. Lastly, this puzzle guarantees the player to use cognitive matching skills to learn about the words mentioned in the Quran in a much more engaging and fun way.

Keywords: Quran puzzle, quranic verses, skills

Quran Puzzle





Cawangan Melaka

QURAN PUZZLE

"Make teaching and learning Quran effective and fun"

Teaching and learning Quran might be difficult to some people Al-Quran puzzle gives a lot of consequences for people, society and economic. Quran Puzzle is different from the ordinary puzzle that we can found in market. This product contains puzzles from Surah from the Holy Al-Quran. It has a lot of specialty and uniqueness in one puzzle game.



PROBLEM STATEMENT

Recently there were many reported article about students or teenagers that are facing difficulty in understanding verses in Quran. Although we were tought to memorizing Quran from young age, but still the old way of memorizing Quran somehow failed for may people.



This game can improve the

recitation of the Al-Quran, the correct order of the verses in the Al-Quran and correct tajweed. In addition, it can reduce the number of people who are poor in mastering tajweed in order to reduce mistake while reading Quran. Besides, it also can improve the memory and train the brain to memorize Al-Quran well.

NOVELTY

FUNCTIONALITY

To be more specific, this product has puzzle pieces made of hard cardboard, a rainbow sticky rubber, printed tajweed pieces and along with the instruction notes in one box.

It also provides a lifeline for such as can asking for help from other people. Especially for teachers, they can follow a special instruction to play with the students. It has 3 levels in total to make it more fun. For anyone who wants to play it for fun, they can choose either easy, medium, or hard levels from the instruction note.



يستم الله الرُخْنِ الرَّحِيْم ﴿1:1﴾ المُنتُذُ يَدِ رَبِّ الْعَلَمِينُ ﴿2:1﴾ الرِخْنِ الرَّحِيْم ﴿1:1﴾ الرِخْنِ الرَّحِيْم ﴿1:1﴾ المُنتَفِيْلُ ﴿2:1﴾ المُنتَفِيْلُ ﴿2:4 المُنتَفِيْلُ ﴿2:4 المُنتَفِيْلُ ﴿2:5 اللَّهُ المُنتَفِيْلُ ﴿2:5 اللَّهُ المُنتَفِيْلُ ﴿2:5 اللَّهُ اللللَّ

COMMERCIALIZATION

VALUE

Teachers are the best target market to buy this Quran puzzle because they can use it at school to test how far the students are able to memorize verses of the Quran.

Parents also can buy this puzzle to make family time more fun and educational. They can use this as a game for their children but at the same time still gain knowledge.

Author

Syukurriah Idrus, Aini Qamariah Mohd Yusof,Ain Syuhada Aniss Bukharee,

Iffa Syasya Shazli, Mimi Nur Syazlien Mohtar, Nurul Izzah

Rosli

Grass Paper

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Abstract

The awareness of recycling among society in Malaysia is quite low compared to neighbouring countries such as Singapore (Ramayah, Lee & Mohamad, 2010). Despite solid waste, for example, plastics, bottles and papers, people always think that organic waste such as leaves and clipping grass are not useable or beneficial to be recycled. Hence, in many developing countries, the government has come with a policy and incentive to the citizen in order to motivate them to recycle organic waste that can be transformed into many innovative products in the market. This, eventually, will boost the economic level of low-income citizens and become one of their choices in generating side income for the family. Grass Paper is a recycled product made from grass which is one of the forms of organic waste. This innovation is derived from the urgency of minimizing cutting trees on earth and starting producing paper from grass that can be found in many places with a different type of fibre. This raw innovation is actually on the idea generation stage and a couple of experiments have been carried out using the type of grass that can be found in Malaysia.

Keywords: Grass paper, recycling, grass

Grass Paper







Cawangan Melaka

GRASS PAPER

AINI QAMARIAH MOHD YUSOF, SYUKURRIAH IDRUS, ERRATUL SHELA ESHAK, NORLIDA ZAKIRAI@ZAKARIA, NUR FAITHZAH JAMIAN, MUNIRAH MOHD JIDI

Grass Paper is a recycle product made from grass which is one of the forms of organic waste. This innovation is derived from the urgency on minimising cutting trees on earth and start producing paper from grass that can be found in many places with different type of fibre.

NOVELTY

We simply can't go paperless because papers are widely use in this world and it it multipurpose (painting, documents, etc). Here we are experimenting and producing paper from source that are easy to get on earth!



YES, GRASS!!

mankind.

A new study published in Nature estimates the planet has 3.04 trillion trees. The research says 15.3 billion trees are chopped down every year

15.3 BILLION

TREES

PUBLICATION

International Symposium of Straits of Melaka (ISSM) 2020

> "MALAYSIAN AWARENESS TOWARDS RECYCLING ORGANIC





COMMERCIALIZATION VALUE

The role of paper remains important in the digital age, with this ubiquitous material still used daily for many purposes worldwide. In fact, the global production of paper and cardboard totals more than 400 million metric tons each year. Paper will have a huge impact in the market. The mass production of different kind of paper using grass (organic waste) will benefits the environment and well being of



IT'S TIME TO TAKE ACTION

Take action by educating yourself and urging your community to get involved in addressing environmental concerns.

GRASS PAPER will help save the environment for future generation

INTELLECTUAL PROPERTY

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Online Assessment and Evaluation in Group Work Project

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Abstract

Studies on the effectiveness of online learning have long been documented in the empirical research literature. Researchers and practitioners have spent a considerable amount of time formulating the best practices and standards in online course design. In addition, evaluating and assessing students' works also became important. The purpose of this study is to provide ideas in assessing and evaluating group work assignments via online learning. The objectives are to create awareness among the academics on how to evaluate group work assignments and recommend consistent, effective, and reliable tools to assess students fairly. The sample used for this study is the undergraduate students in the research methods and methodology course. A short survey was conducted on 90 students to obtain their views on the assessment method. It is anticipated that this study's findings will be useful for the evaluation of the online course especially for group work assessment in achieving the student learning outcomes, and could contribute to the body of literature on evaluation of teaching effectiveness in higher education.

Keywords: Online assessment, effectiveness, undergraduates

Online Assessment and Evaluation in Group Work Project

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



ONLINE ASSESSMENT AND EVALUATION IN GROUP WORK PROJECT

ABSTRACT: Studies on the effectiveness of online learning have long been documented in the empirical research literature. Researchers and practitioners have spent a considerable amount of time formulating the best practices and standards in online course design. In addition, evaluating and assessing student's works also became important. The purpose of this study is to provide ideas in assessing and evaluating group work assignments via online learning. The objectives are to create awareness among the academics on how to evaluate group work assignments and recommend consistent, effective, and reliable tools to assess students fairly. The sample used for this study is the undergraduate students in the research methods and methodology course. A short survey was conducted to 90 students to obtain their views on the assessment method. It is anticipated that this study's findings will be useful for the evaluation of the online course especially for group work assessment in achieving the student learning outcomes, and could contributes to the body of literature on evaluation of teaching effectiveness in higher education.

1.0 OBJECTIVES

Assessing group project is extremely challenging for both students and lecturers. Students can become frustrated when group members disproportionately contribute to the project. Students also find it challenging to navigate the learning process and manage all the tasks involved in group work projects. Lecturers find it difficult to monitor student progress as they engage students in collaborative learning activities involving group work and assess group assignments.

Hence the objective of this project is:

- 1. To identify the issue of having group work assignment
- 2. To identify the advantages and disadvantages of group work assignment
- 3. To provide strategy for assessing group work assignment.

3.0 USEFULNESS

In order to provide consistent, effective, and reliable tools to assess students fairly, the diagram below could be one of the initiative to strategize the implemented of assessing group work assignment.

ASSESSMENT (INPUT) Video Conferencing Presentation Peer Review Assessment Recorded Video Submission Progress Report Group Forum Test Group Discussion Quizzes Poster Presentation ASSESSMENT (OUTPUT)

2.0 ADVANTAGES

Best method to assess teamwork and leadership in group work assessment

Peer Evaluation Among Group Members

Evaluation by Lecturers during Presentation

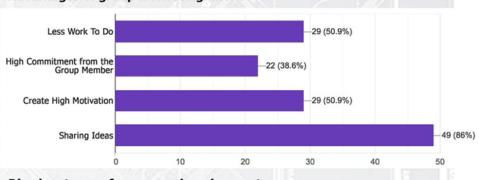
-12 (21.1%)

Evaluation by Lecturer from the Report Submission

Observation by Lecturer during Progress Report

0 10 20 30 40 50

Advantages of group work assignment



Commitment of the Group Member

Allocation of the Task of the Group Member

More Time Need to Complete the Task

Lack of Communication among Group Members

Allocation of the Task of the Group Member (29 (51.8%))

-28 (50%)

4.0 NOVELTY

This research show the preferred assessment method for group works among construction management students. Through this research, the lecturers/academician can identify the best e-assessment strategies in evaluating the group work assignments.

6.0 INVENTORS

5.0 COMMERCIALISATION POTENTIAL

The proposed strategy for Online Assessment and Evaluation in Group Works Project can be promote through sharing session such as conferences or webinar at national or international level with the academics in higher education. It could be a good guidance to provide consistent, effective, and reliable tools to assess students fairly.



Associate Prof Ts Dr Emma Marinie Ahmad Zawawi



Siti Suhaidah Sahab



LAr Rafiuddin Roslan



Dr Norfashiha Hashim

A Massive Open Online Course on Cancer Chemotherapeutics

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Abstract

Massive Online Open Courses (MOOC) is deemed as one of the most versatile ways that offers access to quality education especially during trying times like the Covid-19 pandemic. To this end, the Cancer Chemotherapeutics MOOC (CCM) was developed to provide students with online access to essential knowledge on cancer chemotherapeutics. The CCM is made up of nine (9) modules that integrate pharmacology and medicinal chemistry of both conventional chemotherapy and targeted therapy. The incorporation of chemical structure analysis into pharmacology is essential for the understanding of the structure-activity relationship (SAR) of anticancer agents. In response to the fast-changing field of cancer chemotherapeutics, current advances in antineoplastic research are also included as part of the modules to help students keep abreast of the latest trends in cancer therapy. The CCM was designed to create a complete, professional yet fun-filled learning experience for the students. To enhance students' retention, the complex and sophisticated knowledge of cancer chemotherapeutics will be delivered through bite-sized, digestible online lectures. Additionally, the CCM also aims to promote multi-directional synchronous and asynchronous interactions, be it student-student or student-instructor interactions. As such, the learning process will be facilitated by various instructional materials enriched with interactive and gamification elements that suit various learning styles. Most importantly, the CCM will also evaluate students' comprehension of each module through various types of assessments ranging from quick self-assessment to high order thinking skills assessments. Altogether, this concise, yet comprehensive CCM is expected to provide students with a unique, effective, and enjoyable online learning experience on cancer chemotherapeutics.

Keywords: MOOC, Cancer Chemotherapeutics MOOC (CCM), therapy

A Massive Open Online Course on Cancer Chemotherapeutics

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



ABSTRACT

Massive Open Online Courses (MOOC) is deemed as one of the most versatile ways that offers access to quality education especially during trying times like the Covid-19 pandemic. To this end, the Cancer Chemotherapeutics MOOC (CCM) was developed to provide students with online access to essential knowledge on cancer chemotherapeutics. The CCM is made up of nine (9) modules that integrate pharmacology and medicinal chemistry of both conventional chemotherapy and targeted therapy. The incorporation of chemical structure analysis into pharmacology is essential for the understanding of the structure-activity relationship (SAR) of anticancer agents. In response to the fast-changing field of cancer chemotherapeutics, current advances in antineoplastic research are also included as part of the modules to help students keep abreast of the latest trends in cancer therapy. The CCM was designed to create a complete, professional yet fun filled learning experience to the students. To enhance students' retention, the complex and sophisticated knowledge of cancer chemotherapeutics will be delivered through bite-sized, digestible online lectures. Additionally, the CCM also aims to promote multi-directional of synchronous and asynchronous interactions, be it student-student or student-instructor interactions. As such, the learning process will be facilitated by various instructional materials enriched with interactive and gamification elements that suit various learning styles. Most importantly, the CCM will also evaluate students' comprehension of each module through various types of assessments ranging from quick self-assessment to high order thinking skills assessments. Altogether, this concise, yet comprehensive CCM is expected to provide students with a unique, effective, and enjoyable online learning experience on cancer chemotherapeutics.

1.0 OBJECTIVES

- to provide students with online access to essential knowledge on cancer chemotherapeutics
- to create a complete, professional yet fun filled learning experience to the students
- to promote multi-directional of synchronous and asynchronous interactions be it student-student or student-instructor interactions

3.0 USEFULNESS

- The CCM is made up of nine (9) modules that integrate pharmacology and medicinal chemistry of both conventional chemotherapy and targeted therapy.
- The incorporation of chemical structure analysis into pharmacology is essential for the understanding of the structureactivity relationship (SAR) of anticancer agents.
- In response to the fast-changing field of cancer chemotherapeutics, current advances in antineoplastic research are also included as part of the modules to help students keep abreast of the latest trends in cancer therapy.

4.0 NOVELTY

 This is the first MOOC on Cancer Chemotherapeutics that incorporate the pharmacology and medicinal chemistry of both conventional chemotherapy and targeted therapy

5.0 COMMERCIALISATION POTENTIAL

Certain fees can be applied for students who wish to obtain a certificate through this course.

6.0 INVENTORS

Leader: Dr Aisyah Hasyila Jahidin Members: Assoc Prof Dr Siong Meng Lim

Dr Hasseri Halim Dr Normala Abd Latip Dr Nur Syamimi Ariffin

Prof Dr Ahmed Mahmoud Ahmed Alafify

2.0 ADVANTAGES



- Well organized: intuitive navigation
- Clear and concise instructions
 Current learning materials
- Current learning materials
 Simplified knowledge of cancer sk
- Simplified knowledge of cancer chemotherapeutics
- Bite-sized, digestible online lectures
 Variable instructional materials: Face
- Variable instructional materials: Each video or audio is supplemented with transcript and lecture notes
- Interactive and fun learning process with gamification elements



Packed with activities and various types of assessments ranging from quick self-assessment to high order thinking skills assessments



- Building a learning community: Plentiful opportunities for interactions (students-students and instructors-students)
- Continuous support from tutors

Educational Poster on Basic Sex Education for Young Kids

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Abstract

Sex education, in general, is defined as teaching about human sexuality, including sexual anatomy, sexual reproduction, sexually transmitted diseases, sexual activity, sexual orientation, gender identity, abstinence, contraception, and reproductive rights and responsibilities. However, when it comes to teaching young kids about sex education, the age-appropriate educational material which is important to help convey the knowledge effectively is lacking. Hence, this project was developed based on the idea of providing an age-appropriate educational poster on basic sex education targeting mainly Muslim kids of 7 to 9 years old. The advantages of this educational poster are (1) it can also be used by non-Muslim kids as the basic information provided is of the universal practices, and (2) it comes in bilingual (Bahasa Melayu and English) that can increase the range of student users. This poster will be useful for parents and teachers to explain the basics of sex education to their kids, as well as helps the kids to self-educate themselves through the visuals and text shown on the poster. This poster also has the novelty of providing a one-of-a-kind poster that specifies sex education, particularly for young children aged 7 to 9 of both Muslims and non-Muslims. From the aspect of commercialization potential, the selected topic of sex education and the bilingual feature may be the added selling points to market this poster to the schools or individuals in Malaysia, as well as Indonesia, Brunei, Singapore, and other ASEAN and worldwide countries.

Keywords: Sex education, educational poster, kids aged 7 to 9

Educational Poster on Basic Sex Education for Young Kids





EDUCATIONAL POSTER ON BASIC SEX EDUCATION FOR YOUNG KIDS

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ABSTRACT

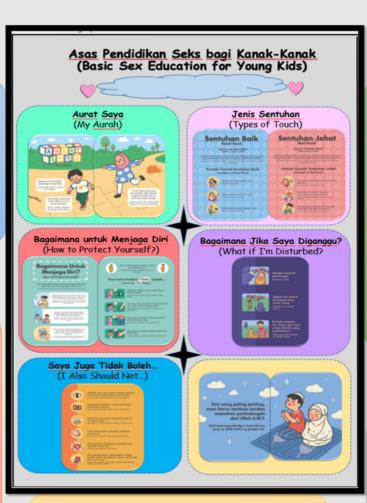
Sex education, in general, is defined as teaching about human sexuality, including sexual anatomy, sexual reproduction, sexually transmitted diseases, sexual activity, sexual orientation, gender identity, abstinence, contraception, and reproductive rights and responsibilities. However, when it comes to teaching young children about sex education, the age-appropriate educational material is important to help convey the knowledge effectively. Hence, this project was developed based on the idea of providing an age-appropriate educational poster on basic sex education targeting mainly Muslim children of 7 to 9 years old. The advantages of this educational poster are (1) it can also be used by non-muslim kids as the basic information provided is of the universal practices, and (2) it comes in bilingual (Bahasa Melayu and English) which increases the range of student users. This poster will be useful for parents and teachers to explain the basics of sex education to their children, as well as helps students to self-educate themselves through the visual and text shown on the poster. This poster also has the novelty of providing one-of-a-kind poster that specifies on sex education, particularly for young children aged 7 to 9 of both Muslims and non-Muslims. From the aspect of commercialization potential, because of its bilingual feature, this poster may be marketed to schools or individuals in Malaysia, as well as Indonesia, Brunei, Singapore and other ASEAN and worldwide countries.

1.0 OBJECTIVE

To provide an age-appropriate educational poster on basics of sex education targeting mainly Muslim kids of 7 to 9 years old.

2.0 ADVANTAGES

- It can also be used by non-muslim kids as the basic information provided is of the universal practices,
- 2. It comes in bilingual (Bahasa Melayu and English) which can increase the range of the student users.



3.0 USEFULNESS

Educating and preparing the young generations (boys and girls) to be able to self-protect from any form of harassments in future.

5.0 COMMERCIALISATION POTENTIAL

The topic of sexual education and the bilingual feature — potential to market to the schools or individuals in Malaysia, as well as Indonesia, Brunei, Singapore and other ASEAN and worldwide countries.

4.0 NOVELTY

- 1. Introducing a new way of educating kids on sexual education.
- 2. One-of-a-kind poster that specifies on sex education, specifically for young kids aged 7 to 9
- 3. Usable by both Muslim and non-Muslim kids.

Low Cost VR for Safety Construction Source

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Abstract

Learning for construction and safety hazard topics can be very challenging during the pandemic of Covid-19. As a basic knowledge and skill, all students should be able to identify potential hazards in their environment. Due to the inherent risk of construction sites, a high incidence of accidents involving both employees and members of the general public in the surrounding region occurs regularly. The pandemic has had an impact on the current safety and health course teaching and learning. Students may get important hands-on experience in a simulated learning environment via the use of mobile virtual reality headsets. This product can be used as a learning aid and promotes self-learning for all the main 21 topics of construction stages using simulated construction sites in a virtual environment. From pre-construction to post-construction, this smartphone application covers all 21 stages of the construction process. Students and instructors only need to download the virtual learning app from the App Store and insert it into Google Cardboard to immerse themselves in an immersive virtual learning environment. The learners will be supplied with a virtual building site that is based on three major construction processes. In addition, students may benefit from the user interface of the smartphone app to improve their capacity to detect and avoid dangers during the construction process. Furthermore, they can also take part in the immersive experience. This product does not only promote self-learning, but it also saves costs in terms of learning such as physical class, traveling of students, time, and of course save lives from Covid-19 infection!

Keywords: VR, safety construction, learning aid, process

Low Cost VR for Safety Construction Source





LOW COST VR FOR CONSTRUCTION SAFETY COURSE ABSTRACT

Construction safety and health training involves the ability to identify potential hazards. This course is divided into two parts: classroom instruction for 22 days, followed by hands-on training in a construction setting for the remaining four days. As a basic knowledge and skill, all students should be able to identify potential hazards in their environment. Due to the inherent risk of construction sites, a high incidence of accidents involving both employees and members of the general public in the surrounding region occurs on a regular basis. The pandemic of Covid 19 has had an impact on the current safety and health course teaching and learning. Businesses, organisations, and educational institutions that offer this kind of training confront a number of challenges. It is essential to identify building risks as early as possible. This is particularly important for new safety supervisors who are assessing first-aid scenarios for their first time. Students may get important hands-on experience in a simulated learning environment via the use of mobile virtual reality headsets. From pre-construction to post-construction, this smartphone application covers all 21 stages of the construction process. As the construction progresses, each of the five kinds of risks is replicated in its own virtual environment, which is updated as the project progresses. Download the virtual learning app from the App Store and insert it into Google Cardboard to immerse yourself in an immersive virtual learning environment. The learner will be supplied with a virtual building site that is based on three major construction processes. Additionally, students may benefit from the user interface of the smartphone app to improve their capacity to detect and avoid dangers during the construction process, in addition to taking part in the immersive experience.

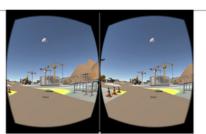
1.0 OBJECTIVES

Occupational Safety and Health (OSH) Hazard Identification Virtual Reality Simulation.A method to experience OSH hazards to complement the Site Visit component of OSH training/education with a mobile virtual reality simulationfor conducting hazard identification as per training/education syllabus using smartphone and compatible Head Mounted Device

Site Visit for Occupational Safety & Health (OSH) training/education unable to experience all the OSH Hazards due to dynamic nature and accessibility of the site being visited. A method to experience OSH hazards to complement the Site Visit component of OSH training/education

with a mobile virtual reality simulation for experiencing hazard identification as per training/education syllabus using smartphone and compatible Head Mounted Device.







2.0 ADVANTAGES

To replace classroom based during pandemic covid 19 to self learning.
 Revisions on all 21 topic of construction stages as well as experience on safety hazards recognition topic with construction site experience.





3.0 USEFULNESS

Enhance OSH training quality by giving simulated experience to all the hazards learnt in their OSH training/education

Cheapest cost option in comparison to implemement non-mobile (smartphone) full fledged virtual reality systems

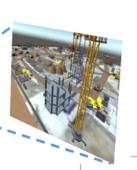
Ease of use/implementation for training participants, students, training providers, etc.

4.0 NOVELTY

Ease of accessibility because MOBILE & can be used anywhere without confining to a

Save resources (time, energy & money) for the students, training providers, education institution, companies, organizations, etc.





5.0 COMMERCIALISATION POTENTIAL

-By university or college that offer civil engineering program/construction industry -By stakeholders like CIDB and NIOSH to use in their courses









6.0 INVENTORS

NURSHAMSHIDA MD SHAMSUDIN (PhD) SALEHUDDIN BIN ABDUL KADIR

"Bilik Kuliah Digital" di Kalangan Pelajar Sijil Perkhidmatan Logistik, Kolej Komuniti Cawangan Rantau Panjang

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Abstract

Pelaksanaan pengajaran dan pembelajaran di atas talian (PdPDT) telah bermula sejak wabak Covid-19 melanda Malaysia pada Mac 2020. Sehubungan dengan itu, beberapa inisiatif telah diusahakan oleh pensyarah bagi memastikan pelaksanaan PdPDT dapat berjalan secara berterusan seperti "Bilik Kuliah Digital" di kalangan pelajar Sijil Perkhidmatan Logistik (SLK), Kolej Komuniti Cawangan Rantau Panjang. Objektif inisiatif ini dibuat adalah untuk memastikan proses PdPDT dapat dilaksanakan mengikut prosedur standard yang telah ditetapkan, sesi penilaian berterusan dapat dibuat melalui platform pembelajaran secara atas talian dan prestasi pencapaian pelajar boleh diukur dengan efisien. "Bilik Kuliah Digital" ini terdiri daripada beberapa platform seperti Google Meet, Google Classroom, Google Drive dan Edmodo. Kegunaan "Bilik Kuliah Digital" adalah untuk menjalankan aktiviti pengajaran dan pembelajaran di atas talian (PdPDT) seperti kelas atau perbincangan, pengurusan data seperti simpanan hasil pelajar iaitu laporan mini projek, tugasan serta mengendalikan sesi penilaian bagi pengukuhan pemahaman pelajar seperti kuiz, ujian dan PaLT (Penilaian Alternatif). Dengan adanya "Bilik Kuliah Digital", ianya dapat memberikan kebaikan dari sudut penjimatan masa, penggunaan kertas yang minimum serta capaian maklumat yang mudah dengan akses internet sehingga membantu pelajar meneruskan PdPDT sehingga akhir sesi pengajian semasa. Kajian pelaksanaan "Bilik Kuliah Digital" ini tertumpu kepada kursus SLK3014 (Pengurusan Operasi Gudang) bagi pelajar semester 3 Sesi Jun 2020 hingga Dis 2020. Pencapaian pelajar dapat diukur melalui analisa bilangan pelajar berdasarkan gred iaitu minimum gred yang dicapai oleh pelajar SLK semester 3 bagi kursus SLK3014 (Pengurusan Operasi Gudang) ini ialah gred B-. Usulan penambahbaikan bagi pelaksanaan "Bilik Kuliah Digital" perlu dibuat oleh pensyarah yang mengajar kursus SLK3014 (Pengurusan Operasi Gudang) agar prestasi pelajar SLK semester 3 dapat dipertingkatkan dari masa ke semasa.

Kata Kunci: "Bilik Kuliah Digital"; penilaian berterusan; Sijil Perkhidmatan Logistik (SLK)

"Bilik Kuliah Digital" di Kalangan Pelajar Sijil Perkhidmatan Logistik, Kolej Komuniti Cawangan Rantau Panjang



e-FESV2: A Platform to Overcome the Misconception of Common Errors in Mathematics

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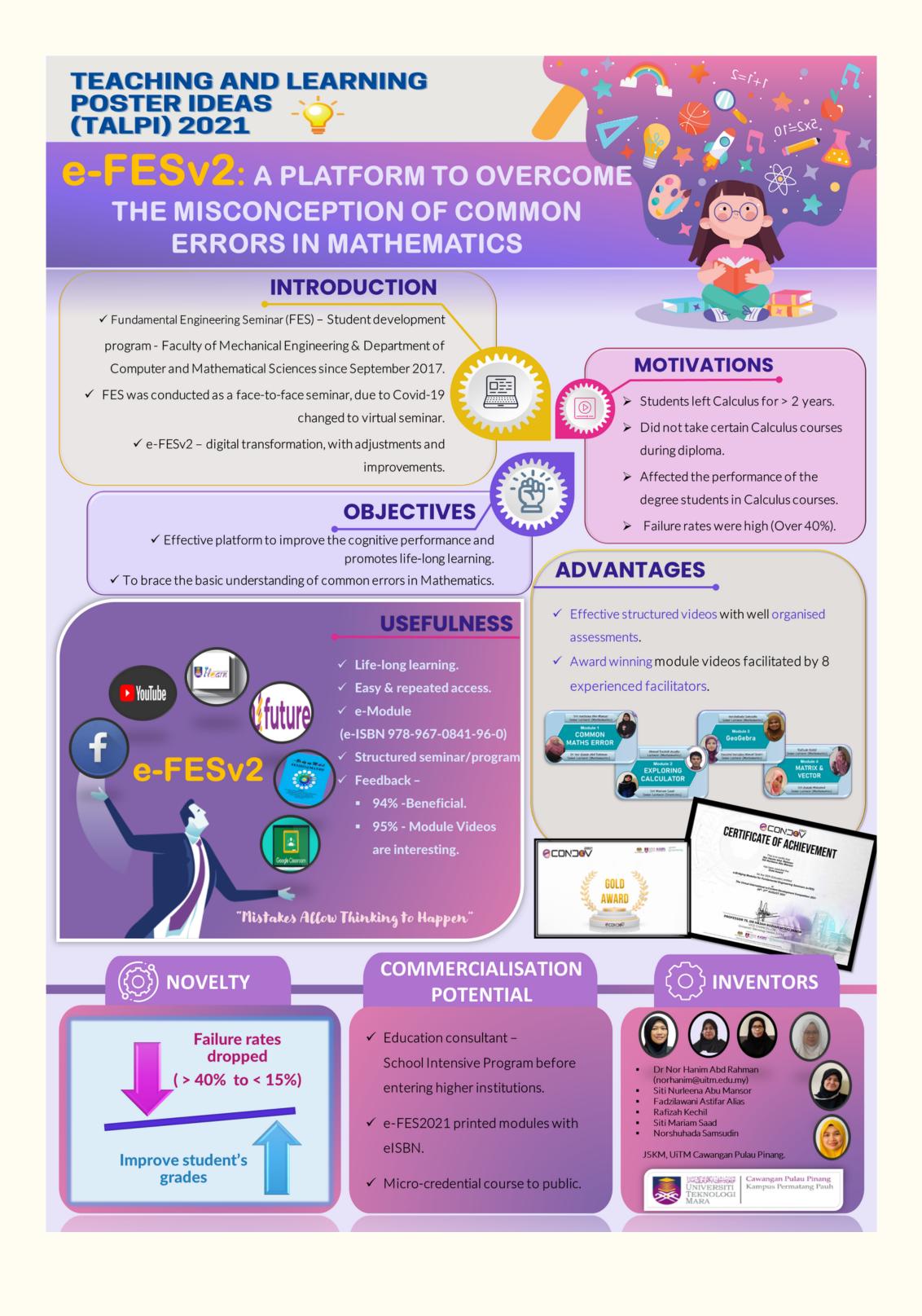
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Abstract

Fundamental Engineering Seminars (FES) is a student development-collaborative program between the Computer and Mathematical Science Department and Mechanical Engineering Faculty in UiTM Pulau Pinang since September 2017. They are designed to strengthen the basic understanding of Mathematics of new engineering students, enrolled from Diploma to Degree who have left Calculus more than two years and lacked certain math codes, which are essential in their degree syllabus. These constraints affected their performances, as the failure rates were recorded over forty percent. This created immediate concern from both the faculties. Currently, the eFundamental Engineering Seminar-2 (e-FESv2) was introduced to overcome the existing problems, with some improvements being made to cater to the current needs. The novelties of the product (eFESv2) are, firstly, the effectiveness of its structured videos and exercises undoubtedly have improved the students' comprehension and performance in their mathematics grades, especially in Calculus. Secondly, failure rates have dramatically dropped from greater than 40 percent to less than 15 percent, as the semester progresses. Thirdly, since it is designed for the lifelong-learning concept, thus this 90 pages e-book can be easily accessed, downloaded and shared for free from Google Classroom (GC), department website, UFuture, iLearn, Facebook and YouTube Channel, by anyone at any time. Fourthly, Students and lecturers not only can repeatedly access a series of structured modules, videos, tutorials, students group activities but are also able to view all the reports from the previous activities. Finally, any updates of e-FESv2 materials, students and lecturers registered will automatically be informed by the GC system. These programs can also be introduced to schools as a preparatory course before entering higher institutions. In a conclusion, e-FESv2 is undoubtedly beneficial as an effective platform to improve the cognitive performance of students in overcoming misconceptions in mathematics. There is no room for deadly errors for an engineer!

Keywords: Fundamental Engineering , Mathematics, videos, exercises

e-FESV2: A Platform to Overcome the Misconception of Common Errors in Mathematics



Bode Plot for Frequency Response : Moving Forward with Distance Learning

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Abstract

Teaching and learning Bode Plot for Frequency Response in Control System course during face-to-face class is quite challenging since it requires a high technical skill for both educators and learners. When the normal class is moved into distance learning due to COVID-19 spread, the process has become more challenging when everyone needs to adapt to a new lifestyle by shifting the learning mode within the shortest time. This project aims to demonstrate the effective distance learning technique for plotting the Bode graph using a Semilog graph paper for engineering students. A holistic approach is utilized, integrating the existing material and technology to establish a virtual teaching & learning tool. OneNote software from Microsoft and a flat-lay table tripod were used for virtual graph plotting and manual graph plotting respectively. Both methods can be implemented not only during the online class for real-time plotting but also for video recording. For the virtual graph plotting, the graph paper was attached and set as the background in the software first, then the graph can be plotted accurately using built-in various colors of pen and pencils, and a ruler. While for manual graph plotting, good lighting attached with the flat-lay table tripod and the Iriun Webcam application installed in the smartphone was utilized to produce a similar environment as indirect learning. The techniques presented here provide an alternative and effective environment for distance teaching and learning of graph plotting that created a better environment and clearer vision for students. Not only should the selected tool for virtual plotting be relevant for distance learning, but also within a regular classroom environment in the future as a replacement for using the whiteboard. The methods used for this graph plotting may be applied to another course elsewhere in the world.

Keywords: Frequency Response, Bode Plot, Semilog graph paper

Bode Plot for Frequency Response : Moving Forward with Distance Learning





BODE PLOT FOR FREQUENCY RESPONSE: MOVING FORWARD WITH DISTANCE LEARNING

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OBJECTIVE

To demonstrate the effective distance learning technique for plotting the Bode graph using a Semilog graph paper for engineering students.

PROBLEM STATEMENTS

Teaching and learning Bode Plot for Frequency Response in Control System course during face-to-face class is quite challenging since it requires a high technical skill for both educators and learners. When the normal class is moved into distance learning due to COVID-19 spread, the process is become more challenging when everyone needs to adapt to a new lifestyle by shifting the learning mode within the shortest time.

USEFULNESS

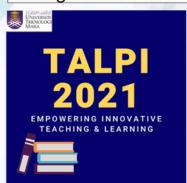
Provides an alternative and effective environment for distance teaching and learning of graph plotting that created a better environment and clearer vision for students.

ADVANTAGES

- ✓ Virtual plotting technique is relevant for both distance learning and regular classroom environment, also suitable for hybrid learning mode.
- ✓ Graph plotting techniques can be applied to another course.

NOVELTY

Alternative techniques in graph plotting for distance learning contributing to the new paradigm shift in teaching & learning to support advanced educational practices through modern technology.



METHOD & RESULTS Virtual Graph Plotting using OneNote Virtual Graph Plotting using Flat-lay Table Tripod Manual Graph Plotting using Flat-lay Table Tripod Manual Graph Plotting using Flat-lay Table Tripod

FEFA Technique in Foundations of Applied Mathematics

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Abstract

Memorizing formulas is one of the essential tasks in learning activities. Many formulas have been developed with their purpose such as to calculate, estimate, analyze and so on. One of the fields that involved more than a hundred formulas is education. In education, mathematical courses frequently become the talk of the field as students need to memorize a lot of formulas to get the correct answers. In UiTM Perak Branch, Tapah Campus, there is one subject that requires students to memorize more than twenty formulas which is the Foundation of Applied Mathematics. This course is taken by semester three students in the Diploma of Sciences. In the past few semesters, the failure rate for this subject has been increasing and has always been the top issue at the management level. Due to some reasons, some researchers did a study and found that memorizing formulas is one of the issues that were highlighted. Therefore, to help students score this course, a newly invented technique called Formula Extracted from the Appendix (FEFA) was introduced. This technique aims to reduce the number of formulas to be memorized by benefitting the provided appendix. In addition, this idea also aims to improve the students' performance by reducing the mistakes in formula-related problems. The effectiveness of FEFA technique was verified as an article was published and showed that FEFA technique acted as one of the good mechanisms to assist students in learning activities.

Keywords: Memorizing formula, FEFA Technique, Foundation of Applied Mathematics

FEFA Technique in Foundations of Applied Mathematics

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



FEFA TECHNIQUE IN FOUNDATIONS OF **APPLIED MATHEMATICS**

ABSTRACT

Memorizing formulas is one of the essential tasks in learning activities. There are many formulas that have been developed with their own purpose such as to calculate, to estimate, to analyse and so on. One of the fields that involved more than a hundred formulas is education. In education, mathematical courses frequently become the talk of the field as students need to memorize a lot of formulas to get the correct answers. In UiTM Perak Branch, Tapah Campus, there is one subject that requires students to memorize more than twenty formulas which is the Foundation of Applied Mathematics. This course is taken by semester three students in the Diploma of Sciences. In the past few semesters, the failure rate for this subject has been increasing and always been the top issue in management level. Because of that, some researchers did a study and found that memorizing formulas is one of the issues that was highlighted. Therefore, in order to help students score this course, a newly invented technique called Formula Extracted from the Appendix (FEFA) was introduced. This technique aims to reduce the number of formulas to be memorized by benefitting the provided appendix. In addition, this idea also aims to improve the students' performance by reducing the mistakes in formula related problems. The effectiveness of FEFA technique was verified as an article was published and showed that FEFA technique acted as one of the good mechanisms to assist students in learning activities.

1.0 OBJECTIVES



To introduce the FEFA technique among students



To help the students improve their performance by reducing the mistake in formula related problems.

2.0 ADVANTAGES



Will help students to reduce the total numbers of formula to be memorized.

Will students' increase the understanding of how to apply the correct formula instead of just memorizing the formulas.

3.0 USEFULNESS



Encourage students to extract the formula from the given Appendix.



As one of the good mechanism to assist students in learning process.

4.0 NOVELTY



Formula Extracted from the given Appendix (FEFA) is a new technique introduced which will help students to reduce the total number of formulas to be memorized by benefiting the provided appendix.

5.0 COMMERCIALISATION POTENTIAL

This technique can improve students' performance in the course as it help reducing the mistakes related to formula. Besides, when the students' progress become better, it can help the faculty deals with the high failure rate issue.

6.0 INVENTORS



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MatVec: A One-Stop Platform to Enhance Students' Skills in Calculation of Matrices and Vectors

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Abstract

MatVec is a one-stop platform that aims to assist students in their preparation for the topic of vector calculus. Lack of knowledge and awareness of skills in calculating matrices and vectors will cause problems with their calculation of mathematical problems related to vector calculus. The goal of MatVec is to provide a one-stop platform for students to improve their knowledge and understanding of matrices and vectors. We have created a video and flipbook to provide students with simple and quick self-learning strategies that they can use anytime and anywhere. In this innovation, we use digital technologies to make short videos highlighting the instructor's video that covers a manual approach so that students can polish their knowledge and understanding of the calculation of determinant, dot product and cross product. We also created a short video showing how to use a scientific calculator and Symbolab Calculator. MatVec also contains a flipbook that includes short notes, step-by-step examples, live activities and exercises. Flipbook was designed to be short, straightforward and appealing to draw students' attention to the content. The utilization of MatVec, as published Google Classroom, has helped students enhance their grades. The use of MatVec contributed to the success of their examination results, as evidenced by the fact that the number of students who failed dropped from 40% in February 2021 to 15% in July 2021. The fact that students' grades improved suggests that the methodology of integrating digital technologies as additional learning tools is significant and beneficial. This is because the development of MatVec considered the theories of learning and the understanding of students' needs and interests.

Keywords: Vector calculus, MatVec, Flipbook

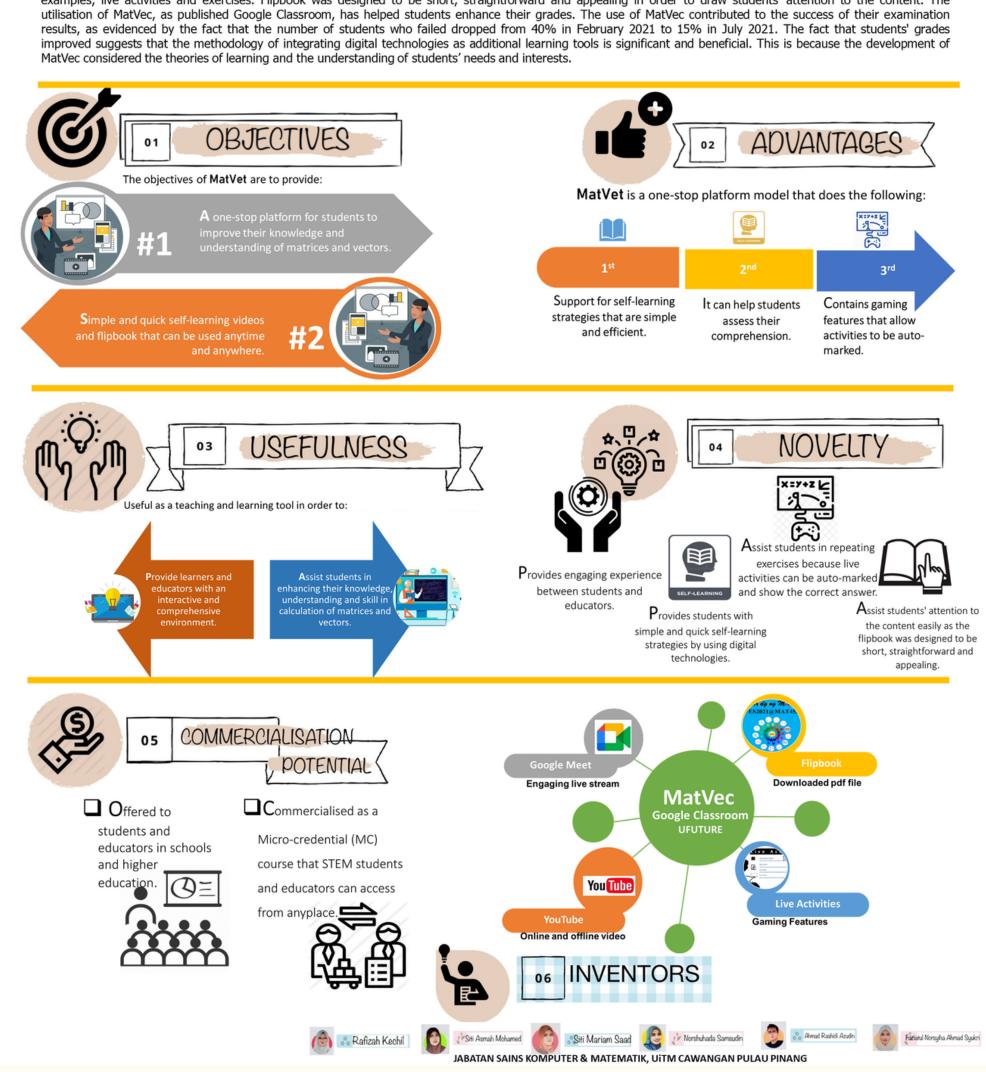
MatVec: A One-Stop Platform to Enhance Students' Skills in Calculation of Matrices and Vectors



MatVec: A ONE-STOP PLATFORM TO ENHANCE STUDENTS' SKILLS IN CALCULATION OF MATRICES AND VECTORS

ABSTRACT

MatVec is a one-stop platform that aims to assist students in their preparation for the topic of vector calculus. Lack of knowledge and awareness of skills in calculating matrices and vectors will cause problems with their calculation of mathematical problems related to vector calculus. The goal of MatVec is to provide a one-stop platform for students to improve their knowledge and understanding of matrices and vectors. We have created a video and flipbook to provide students with simple and quick self-learning strategies that they can use anytime and anywhere. In this innovation, we use digital technologies to make short videos highlighting the instructor's video that covers a manual approach so that students can polish their knowledge and understanding of the calculation of determinant, dot product and cross product. We also created a short video showing how to use a scientific calculator and Symbolab Calculator. MatVec also contains a flipbook that includes short notes, step-by-step examples, live activities and exercises. Flipbook was designed to be short, straightforward and appealing in order to draw students' attention to the content. The utilisation of MatVec, as published Google Classroom, has helped students enhance their grades. The use of MatVec contributed to the success of their examination results, as evidenced by the fact that the number of students who failed dropped from 40% in February 2021 to 15% in July 2021. The fact that students' grades improved suggests that the methodology of integrating digital technologies as additional learning tools is significant and beneficial. This is because the development of MatVec considered the theories of learning and the understanding of students' needs and interests.



Extended Piano Technique And The Soundscape Emulation of Gambus Johor

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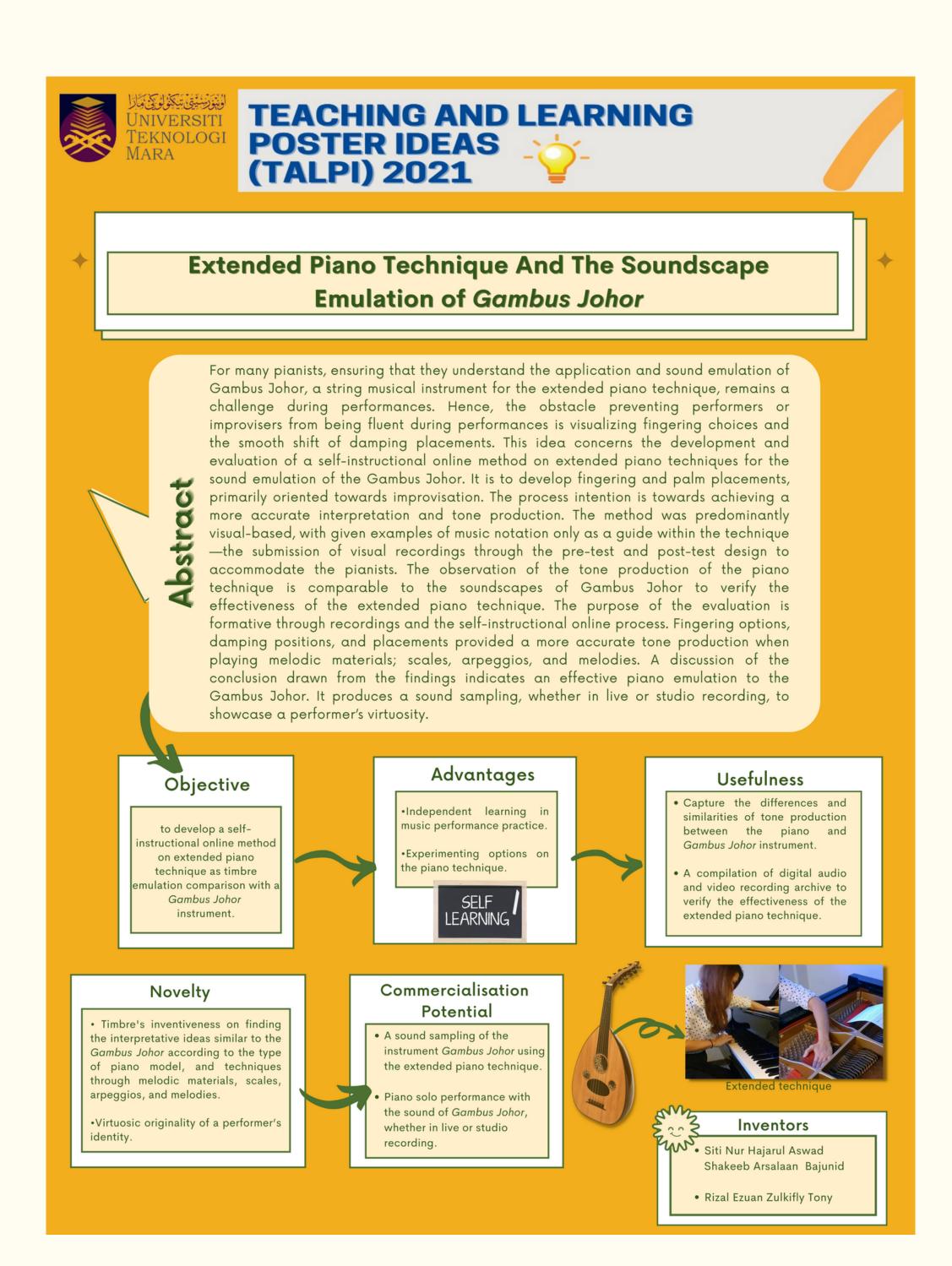
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Abstract

For many pianists, ensuring that they understand the application and sound emulation of Gambus Johor, a string musical instrument for the extended piano technique, remains a challenge during performances. Hence, the obstacle preventing performers or improvisers from being fluent during performances is visualizing fingering choices and the smooth shift of damping placements. This idea concerns the development and evaluation of a self-instructional online method on extended piano techniques for the sound emulation of the Gambus Johor. It is to develop fingering and palm placements, primarily oriented towards improvisation. The process intention is towards achieving a more accurate interpretation and tone production. The method was predominantly visual-based, with given examples of music notation only as a guide within the technique-the submission of visual recordings through the pre-test and post-test design to accommodate the pianists. The observation of the tone production of the piano technique is comparable to the soundscapes of Gambus Johor to verify the effectiveness of the extended piano technique. The purpose of the evaluation is formative through recordings and the self-instructional online process. Fingering options, damping positions, and placements provided a more accurate tone production when playing melodic materials; scales, arpeggios, and melodies. A discussion of the conclusion drawn from the findings indicates an effective piano emulation to the Gambus Johor. It produces a sound sampling, whether in live or studio recording, to showcase a performer's virtuosity.

Keywords: Extended Piano Technique, Gambus Johor, performance

Extended Piano Technique And The Soundscape Emulation of Gambus Johor



eCalculator: An Effective Teaching & Learning Aid In Calculus Comprehension

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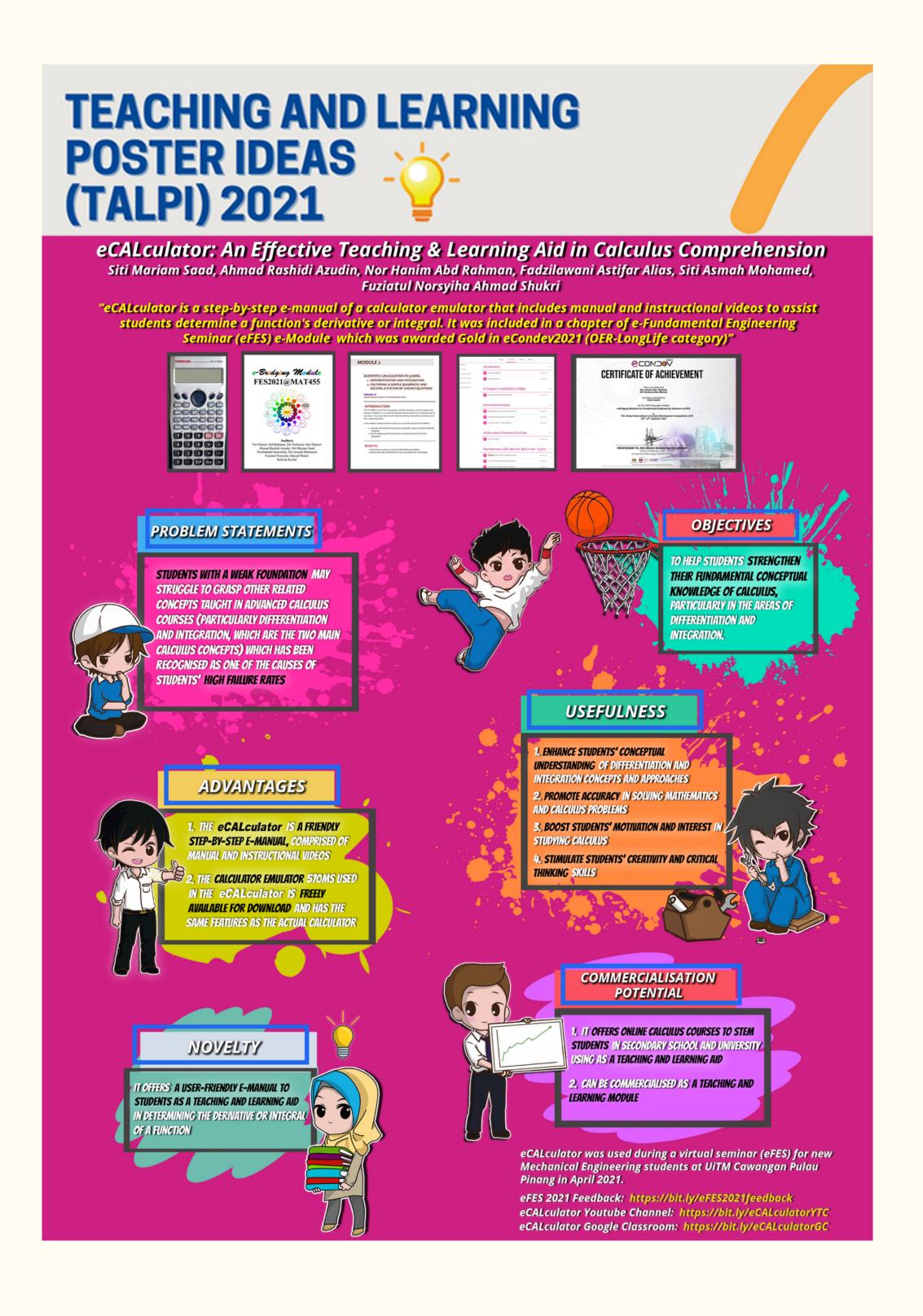
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Abstract

Calculus is a compulsory subject for university students enrolled in STEM study programs. Some basic calculus concepts are taught as early as secondary school, and yet undergraduate students struggle to understand definitions and different representations of mathematical and calculus concepts, particularly differentiation and integration, which are the two main calculus concepts. STEM students need to have a solid foundation in mathematics and calculus, as most applications in science and engineering require calculus. Students with a weak foundation may struggle to grasp other related concepts taught in advanced calculus courses, which has been recognized as one of the causes of students' high failure rates. Thereby, eCALculator is introduced as a teaching and learning aid that uses a calculator emulator 570MS to help students improve their basic conceptual understanding of calculus. The eCALculator is a step-by-step e-manual of a calculator emulator that includes manual and instructional videos to assist students to determine a function's derivative or integral. The eCALculator was used during a virtual seminar for new Mechanical Engineering students at UiTM Cawangan Pulau Pinang in April 2021. Through the eCALculator and exercises made accessible in a Google Classroom (GC) platform, students learned how to effectively use a calculator emulator to solve differentiation and integration problems. The e-manual is also available as a chapter in an e-book, which students and other interested parties can access and download for free from the GC platform and the department website, and the videos can be viewed on YouTube. With the eCALculator, students will not only improve their accuracy in solving calculus problems, but it can also boost students' motivation and interest in calculus and other related courses, which is especially important for low-achieving mathematics students.

Keywords: Calculus, eCalculator, STEM, mathematics

eCalculator: An Effective Teaching & Learning Aid In Calculus Comprehension



Comparing Answering Ability on Pre-Calculus (MAT133) Final Assessment Between Gender: Case in UiTM Tapah

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Abstract

The research was conducted on 108 students' full-time part 1 Diploma of Science who are taking a Pre-Calculus course. Pre-Calculus covers additional algebraic and trigonometric topics. Numerous studies have reported that the poor performance of students in mathematics affected their major courses. In the same situation, UITM had a higher failure rate nearly every semester in mathematics courses, especially in Pre-Calculus. The purpose of this research is first to identify the performance of students in each question of the final assessment in Pre-Calculus. From the findings, students faced problems with answering question 2. This revealed that most students face difficulties in handling sketches of parabola and circles. Further, to investigate students' performance concerning gender using Principal Component Analysis, PCA and t-test analysis. It was discovered that female students outperformed male students in this course.

Keywords: Pre-Calculus, mathematics, gender, comparison

Comparing Answering Ability on Pre-Calculus (MAT133) Final Assessment Between Gender: Case in UiTM Tapah





ABSTRACT

THE RESEARCH WAS CONDUCTED ON 108 STUDENTS' FULL-TIME PART 1 DIPLOMA OF SCIENCE WHO ARE TAKING A PRE-CALCULUS COURSE. PRE-CALCULUS COVERS ADDITIONAL ALGEBRAIC AND TRIGONOMETRIC TOPICS. NUMEROUS STUDIES HAVE REPORTED THAT THE POOR PERFORMANCE OF STUDENTS IN MATHEMATICS AFFECTED THEIR MAJOR COURSES. IN THE SAME SITUATION, UITM HAD A HIGHER FAILURE RATE NEARLY EVERY SEMESTER IN MATHEMATICS COURSES, ESPECIALLY IN PRE-CALCULUS. THE PURPOSE OF THIS RESEARCH IS FIRST TO IDENTIFY THE PERFORMANCE OF STUDENTS IN EACH QUESTION OF THE FINAL ASSESSMENT IN PRE-CALCULUS. FROM THE FINDINGS, STUDENTS FACED PROBLEMS WITH ANSWERING QUESTION 2. THIS REVEALED THAT MOST STUDENTS FACE DIFFICULTIES IN HANDLING SKETCHES OF PARABOLAS AND CIRCLES. FURTHER, TO INVESTIGATE STUDENTS' PERFORMANCE IN RELATION TO GENDER USING PRINCIPAL COMPONENT ANALYSIS, PCA AND T-TEST ANALYSIS. IT WAS DISCOVERED THAT FEMALE STUDENTS OUTPERFORMED MALE STUDENTS IN THIS COURSE.

1.0 OBJECTIVES

THIS STUDY WOULD LIKE:

- TO IDENTIFY STUDENTS' PERFORMANCE IN EACH QUESTION OF THE FINAL ASSESSMENT IN PRE-CALCULUS
- TO COMPARE THE FINAL ASSESSMENT PERFORMANCE AMONG UITM TAPAH STUDENTS BASED ON GENDER.

3.0 USEFULNESS

- THIS STUDY CREATES A PEDAGOGICAL PRACTICE FOR THE LECTURERS. BASED ON THE FINDINGS OF THIS RESEARCH. THE LECTURERS CAN ESTABLISH A GROUP WITH A COMBINATION OF MALES AND FEMALES AS FEMALES DOMINATE MALES
- THE LECTURES SHOULD BE ADDRESSED UTILIZING VISUAL TOOLS, SUCH AS THE WOLFRAM ALPHA SOFTWARE AND THE DESMOS INTERNET APPLICATION, INSTEAD THAN USING TRADITIONAL EXPLORATORY APPROACHES.
- STUDENTS MAY COMPREHEND WEAK TOPICS MORE EFFECTIVELY.
- THE RESOURCE PERSON CAN BE AWARE OF WHETHER THE SYLLABUS CORRESPONDS TO THE CURRICULUM.

5.0 COMMERCIALISATION POTENTIAL

- THE RESEARCH CAN BE POTENTIALLY AID LECTURERS TO MONITOR THE PERFORMANCE OF BOTH GENDERS.
- IT WILL FACILITATE INNOVATIVE TEACHING PRACTICE FOR THE LECTURERS.

2.0 ADVANTAGES

- THIS STUDY INVESTIGATED THE POTENTIAL AND COMPETENCE OF STUDENTS IN RESPONDING TO THE FINAL ASSESSMENT OF THE PRE-CALCULUS COURSE, WHICH WAS VIEWED AS A CRITICAL ISSUE.
- . THE DATA WILL REVEAL WHICH TOPICS WERE MOSTLY UNSCORED AMONG THE GENDERS AND NEED FURTHER ATTENTION DURING THE LESSONS.
- ADDITIONALLY, THIS WILL MOTIVATE THE LECTURERS TO ASSESS THE EFFICACY AND IMPORTANCE OF THE SUBJECTS ADDRESSED.
- STUDENTS CAN ACQUIRE THE CURRICULUM SUBJECTS BETTER BEFORE TAKING CALCULUS IN THE NEXT SEMESTER.
- BOTH GENDERS' ABLE TO ACHIEVE BALANCE AND EXCELLENT, ESPECIALLY IN THE CGPA RESULTS.
- THE STAKEHOLDERS ARE SATISFIED WITH THE STUDENTS' PERFORMANCE.

4.0 NOVELTY

- THE FIRST STUDY ABOUT MAT 133 FINAL ASSESSMENT IN UITM TAPAH TO DETERMINE STUDENTS' OVERALL PERFORMANCE.
- AN INITIATIVE TO ASSIST LECTURERS AND RESOURCE PERSON TO ENHANCE THEIR PEDAGOGICAL PRACTICE WITH DIGITAL APPLICATIONS.

6.0 INVENTORS

- 1.NAJIHAN AWANG @ ALI
- 2.NURRIDA AQILAH MOHAMAD RIDZUAN
- 3.NURUL HUSNA JAMIAN
- 4.SYADATUL SYAEDA MAT SALEH

Integrative Language-Based Communication Diagram

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Abstract

Communication is the act of exchanging meaning among entities through verbal or nonverbal means. However, communication breakdown may appear due to age-related differences between young adults and the elderly. This is because during the process of aging, communication skills change subtly due to physical health and cognitive decline. Hence, there is a need to understand how to overcome these communication issues that could potentially create a more complex communication dynamic. Therefore, the development of the Integrative Language-based Communication Diagram can facilitate effective communication between young adults and the elderly. This integrative diagram reflects a combination of understanding Berlo's SMCR Communication Model, guided by the current analysis and arranged in a manner where all themes are conceptually coherent. It is hoped that this diagram could help the young adults to have a better understanding of communication challenges faced by the older adults. By practicing these strategies, it could reduce the prevalence of communication breakdown and thus, the message can be transferred successfully and contribute to effective communication. It is also recommended that the integrative language-based communication diagram can be disseminated to the caretakers in old folks' homes, medical practitioners and the public. The infusion of these themes in the existing communication process may contribute to a better understanding of effective communication within the older and young adult dyad.

Keywords: communication, age-related differences, elderly

Integrative Language-Based Communication Diagram





INTEGRATIVE LANGUAGE-BASED COMMUNICATION DIAGRAM

ABSTRACT

Communication is the act of exchanging meaning among entities through verbal or nonverbal means. However, communication breakdown may appear due to age-related differences between the young adults and the elderly. This is because during the process of aging, communication skills change subtly due to physical health and cognitive decline. Hence, there is a need to understand on how to overcome these communication issues that could potentially create a more complex communication dynamic. Therefore, the development of the Integrative Language-based Communication Diagram can facilitate effective communication between the young adults and the elderly. This integrative diagram reflects a combination of understanding Berlo's SMCR Communication Model, guided by the current analysis and arranged in a manner where all themes are conceptually coherent. It is hoped that this diagram could help the young adults to have a better understanding on communication challenges faced by the older adults. By practicing these strategies, it could reduce the prevalence of communication breakdown and thus, the message can be transferred successfully and contribute to the effective communication. It is also recommended that the integrative language-based communication diagram can be disseminated to the caretakers in old folks' homes, medical practitioners and to the public. The infusion of these themes in existing communication process may contribute to the better understanding of effective communication within the older and young adult dyad.

Keywords: Communication, Age-Related Differences, Elderly

1.0 OBJECTIVES

- i. To help the young adults to have a better understanding on communication challenges faced by the older adults.
- i. To reduce the prevalence of communication breakdown within the older and young adult dyad.

2.0 ADVANTAGES

- i. The diagram is precise and easily understandable.
- ii. The supplementary element of distraction helps in making the communication effective by considering any distractions that might interfere.

3.0 USEFULNESS

- The diagram helps identify and understand the major components in communication process (Sender, Message, Channel, and Receiver).
- ii. It helps both older and younger adults to measure the effectiveness of communication.

4.0 NOVELTY

The diagram placed a specific emphasis on the communication within the older and young adult dyad which integrates three themes: 1) speak slowly, clearly, and loudly, 2) use short, simple words and sentences, and 3) avoid distractions.

5.0 COMMERCIALISATION POTENTIAL

- i. Training module for caretakers and medical practitioners.
- ii. Interactive multimedia e-module as a learning resource for students.

*Knowing the feasibility of interactive multimedia, the module also incorporates simulations in order to facilitate learners in both independent and conventional learning.

6.0 INVENTOR

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7.0 PUBLICATION

Nur Asyikeen Kamarudin, Fazlinda Hamzah and Shafinar Ismail. (2021). Bridging Communication Gap: Overcoming Age-Related Differences Between the Young Adults and the Elderly. *E-Proceeding for Asian Conference on Business, Economics and Social Science (ACBESS)* 2021. e ISBN 978-967-25696-0-2.

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Student E-Portfolio Development for Online Learning in Mathematics Course

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Abstract

The use of digital technology becomes important and necessary during this pandemic. It transforms the traditional physical teaching and learning process into online learning. It constructs the knowledge and exploration of the digital world and allows remote communication between teachers and students without boundaries. One of the problems that exist during online learning is the measurement of student growth and their learning development especially in learning Mathematics courses. The use of digital technology can act as assistance in this problem. There are many terms related to digital technologies such as bring your device (BYOD), e-portfolio, flipped classroom, personal learning network and virtual learning environment. This research focused on e-portfolio, which it is where the learners and teachers create an electronic platform of work that is able for them to keep track of their learning journey. The student is required to develop a course e-portfolio that includes their background, reflective thought on a certain topic, assessment submission and solution of exercises given in class. A variety of platforms can be chosen depending on their preferences. This can provide a quick process for the student to share their work and is always available for teachers to access. Some of the benefits of this process are the student is exposed to the digital platform in developing their digital literacy skills and it offers immediate feedback from teachers as it is achievable anytime and anywhere. Besides, their learning performance can be monitored closely by teachers.

Keywords: digital technology, mathematics, E-Portfolio, student

Student E-Portfolio Development for Online Learning in Mathematics Course



Keberkesanan Penggunaan Teknologi Digital dalam Proses PdPDT bagi Subjek Pengiraan Kolej Komuniti Pasir Mas dan Kolej Komuniti Cawangan Rantau Panjang

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Abstrak

Pandemik COVID19 telah membawa perubahan norma baru bagi pengajaran dan pembelajaran dalam talian (PdPDT) di Institusi Pengajian Tinggi termasuklah di Kolej Komuniti. Penggunaan teknologi digital seperti aplikasi Google Classroom, Google Meet, Jamboard dan Kahoot merupakan medium pembelajaran yang memudah cara dan meningkatkan pemahaman pelajar terhadap subjek pengiraan. Objektif kajian ini adalah untuk melihat keberkesanan penggunaan teknologi digital dalam proses PdPDT bagi subjek pengiraan. Kelebihan pembelajaran secara atas talian akan menjadi lebih interaktif dengan kepelbagaian aplikasi yang diguna dalam subjek pengiraan iaitu SPP 2073 Prinsip Perakaunan di Kolej Komuniti Pasir Mas (KKPM) dan SLK1012 Matematik Perniagaan di Kolej Komuniti Rantau Panjang (KKcRP). Bagi menilai keberkesanan penggunaan teknologi digital dalam subjek pengiraan, satu set soal selidik telah diedarkan kepada 26 responden yang merupakan pelajar yang sedang mengikuti PdPDT di KKPM dan KKcRP. Dapatan soal selidik ini menunjukkan pelajar bersetuju kaedah PdPDT bagi subjek pengiraan menjadi lebih menarik sekiranya pensyarah menggunakan pelbagai aplikasi bagi memudahkan kefahaman dan menarik minat mereka dengan skor min 4.23 dan 4.54. Aplikasi Jamboard memudahkan pemahaman pelajar untuk membuat pengiraan terutamanya bagi topik yang memerlukan formula dan jalan pengiraan dengan skor 4.12. Manakala aplikasi Kahoot lebih interaktif dan menarik minat pelajar dengan subjek pengiraan dengan skor 4.65. Pelantar komunikasi WhatsApp dan Telegram digunakan sebagai medium interaksi bersama pelajar bagi membina hubungan yang positif agar pelaksanaan PdPDT menjadi lebih efektif. Pelajar bersetuju aplikasi Google Classroom dan Telegram sering digunakan sebagai medium perkongsian bahan pembelajaran seperti nota dan soalan penilaian berterusan (PB) seperti tugasan, kuiz, ujian dan projek dengan skor 4.77 dan 4.50. Kajian ini membuktikan subjek pengiraan yang diajar lebih mudah untuk difahami apabila pensyarah menggunakan aplikasi teknologi digital semasa PdPDT berbanding dengan kaedah bersemuka. Dapatan ini juga dapat membantu para pensyarah untuk memilih aplikasi yang sesuai bagi membantu mereka dalam memastikan PdPDT subjek pengiraan menjadi lebih menarik dan efektif.

Kata Kunci: Subjek pengiraan, teknologi digital, aplikasi PdPDT, kolej komuniti

Keberkesanan Penggunaan Teknologi Digital dalam Proses PdPDT bagi Subjek Pengiraan Kolej Komuniti Pasir Mas dan Kolej Komuniti Cawangan Rantau Panjang



Enhancing Graduate Employability Through Community-Based Learning Project

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Abstract

Graduate employability is used as a measurement by both Higher Education Institutions (HEI) and employers on the graduates' marketability. It has shifted from demand-led skills sets toward a holistic view of "graduate attributes" (Ghavifekr et al., 2016). Most literature acknowledges the definition of graduate employability as a set of graduated skills, understandings, and personal attributes that make graduates succeed in their chosen fields (Saibon and Kamis, 2019). This research is mixed methods research that utilizes both qualitative and quantitative methods. The research identifies the primary attributes that contribute to Graduate Employability and evaluates the effectiveness of the new Community-Based Learning Framework in enhancing Graduate Employability. The research method framework was divided into pre-design and development (focus group) and post-design and development (online survey). The pre-design & development phase encompassed a focus group with twenty (20) recruitment specialists from various industries. Through the pre-design and development (focus group), the researcher discovered five (5) primary attributes (Emotional and Social Intelligence, Resilience, Thought Leadership, Cognitive Flexibility, and Digital Literacy) that employers see as rising in prominence. These attributes were later adapted to design a new Community-Based Learning Framework, the Razakian's Community-Based Learning Framework. After three (3) months of implementing the Razakian's Community-Based Learning Framework to the final year students at UNIRAZAK, twenty (20) recruitment specialists from the pre-design & development phase were contacted to complete an online survey. In this phase, a model fit analysis was performed using Poisson Regression to identify the correlations between variables in the dataset. The result reflects an optimistic employer's attitude towards the Razakian's Community-Based Learning Framework and an improvement in UNIRAZAK Graduate Employability by 28% in 2019 based on the Ministry of Higher Education (MoHE) Graduate Tracer Study.

Keywords: Graduate employability, Community-Based Learning Framework, student

Enhancing Graduate Employability Through Community-Based Learning Project



ENHANCING GRADUATE EMPLOYABILITY THROUGH COMMUNITY-BASED LEARNING PROJECT

by Dr. Zuhaili Akmal Ismail, Sunway University & Shamsul Hamimi Ab. Rahman, UNIRAZAK

ABSTRACT

Graduate employability is used as a measurement by both Higher Education Institutions (HEI) and employers on the graduates' marketability. It has shifted from demand-led skills sets toward a holistic view of "graduate attributes" (Ghavifekr et al., 2016). Most literature acknowledges the definition of graduate employability as a set of graduated skills, understandings, and personal attributes that make graduates succeed in their chosen fields (Saibon and Kamis, 2019). This research is mixed methods research that utilizes both qualitative and quantitative methods. The research identifies the primary attributes that contribute to Graduate Employability and evaluates the effectiveness of the new Community-Based Learning Framework in enhancing Graduate Employability. The research method framework is divided into pre-design and development (focus group) and post-design and development (online survey). The pre-design & development phase encompassed a focus group with twenty (20) recruitment specialists from various industries. Through the pre-design and development (focus group), the researchers discovered five (5) primary attributes (Emotional and Social Intelligence, Resilience, Thought Leadership, Cognitive Flexibility, and Digital Literacy) that employers see as rising in prominence. These attributes were later adapted to design a new Community-Based Learning Framework, the Razakian's Community-Based Learning Framework. After three (3) months of implementing the Razakian's Community-Based Learning Framework to the final year students at UNIRAZAK, twenty (20) recruitment specialists from the pre-design & development phase were contacted to complete an online survey. In this phase, a model fit analysis was performed using Poisson Regression to employer's attitude towards the Razakian's Community-Based Learning Framework and an improvement in UNIRAZAK Graduate Employability by 28% in 2019 based on the Ministry of Higher Education (MoHE) Graduate Tracer Study.

3.0 USEFULNESS



Figure 2: Razakian's Community-Based Learning Framework

After three (3) months of implementing the Razakian's Community-Based Learning Framework to the final year students, twenty (20) recruitment specialists from the pre-design & development phase were contacted to complete an online survey. The objective of the online survey is to assess the effectiveness of the framework. All five (5) primary attributes identified by Malaysian employers from the perceptual schemas during the pre-design & development phase exhibited the highest level of consistency by receiving the majority voice in the higher scale through a Median of 3 (High). This finding agrees that Razakian's Community-Based Learning Framework allows the expression and elaboration of instrumental meanings for a better Graduate Employability.



Figure 3: The UNIRAZAK Batch 2019 Graduate Employability rate peaked from 54% to 82%

Based on the Ministry of Higher Education (MoHE) Graduate Tracer Study report released in 2020, UNIRAZAK improved their Graduate Employability rate by 28% for the graduates of 2019.

1.0 OBJECTIVES







of employers concerning the Learning Framework that allows the new Community-Based Learning attributes that will contribute to the expression and elaboration of Graduate Employability rate.



Framework that will enhance instrumental meanings for a better graduate's employability attributes

2.0 ADVANTAGES

Graduate Employability rate.

Razakian's Community-Based Learning Framework enables graduates to meet the five (5) primary attributes identified by Malaysian employers. The researchers identified the attributes from the perceptual schemas during the pre-design & development phase; a focus group with twenty (20) recruitment specialists from the industry.

Figure 1: Five (5) primary attributes identified by Malaysian employer that contributed to the Graduate Employability

4.0 NOVELTY

Many researchers have discussed the Graduate Employability rate in Malaysia, such as Ghavifekr and Kenayathulla (2016), Saibon and Kamis (2019), Tapsir et al. (2019), and Ma'dan et al. (2020). Still, none has proposed and test a framework to improve the Graduate Employability rate.

This research took a year for the whole cycle to complete, from pre-design and development (focus group) and post-design and development (online survey). The choice to combine qualitative and quantitative methods reflected the desire to fully understand the phenomenon under investigation and allowing the situated aspects of learning and communicating to come through in this research. The researchers' consideration of both fits with Creswell's (2018) $notion of combining \ methods \ in \ a \ simultaneous \ process. \ Rather than \ using \ one \ (1) \ type \ of \ approach \ to \ support \ the$ other, the researchers utilized two (2) kinds of methods for their strengths.

5.0 COMMERCIALISATION POTENTIAL

1) FUNDING

2) COPYRIGHT AND INTELLECTUAL PROPERTY







A total of RM15,000 research grant was received from Yayasan Pelaburan Bumiputra (YPB) and Perbadanan Usahawan Nasional Berhad (PUNB).

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IP Protection Term: January 2020 - January 2023

3) FRAMEWORK ADOPTION











6.0 INVENTORS







The Effectiveness of Student Intervention Program in Higher Education - My Advisee Program Outcomes (PO)

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Abstract

The school is concerned about the performance of the program outcomes (PO) of the Diploma Student in Civil Engineering. Therefore, 'My Advisee POs' is carried out every semester to the students that have less than 50% of their PO attainment in the previous semester which is after completing the fundamental and intermediate courses of the examination result. Involvement of the Lecturer in Charged (LIC), Team Teaching, and Academic Advisor (AA) is monitored closely by the Head of Studies and Outcome-Based Education (OBE) Committee to ensure the program is successful and improvement of the PO is visible. The LIC and Team Teaching is responsible for selecting and conducting one or half-day programs such as seminars/webinars/technical talks/simulations/competitions subjected to their PO. In sessions with the Academic Advisor, students will receive guidance and support through the offer of appropriate advice including referral to appropriate support systems, e.g., learning support program, online resources, counseling, referral to relevant academic or administrative points of contact, such as Buddy System Coordinator, Academic and Student Affair and extra tutorial support from the school's intervention program. This paper describes a survey tool, called the Program Effectiveness Survey, which can be used to evaluate and improve the effectiveness of the program. The tool provides feedback from students on the outcomes and understanding of the virtual webinar programs and how it could be improved. The survey was found to have a relatively high percentage, but reliability was below appropriate levels.

Keywords: Student Intervention Program, Program Outcomes (PO), Outcome Based Education (OBE), Lecturer in Charged (LIC), Academic Advisor (AA)

The Effectiveness of Student Intervention Program in Higher Education - My Advisee Program Outcomes (PO)

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



THE EFFECTIVENESS OF STUDENT INTERVENTION PROGRAM IN HIGHER EDUCATION - MY ADVISEE PROGRAM OUTCOMES (POs)

ABSTRACT

The School of Civil Engineering concerns about the performance of the Program Outcomes (POs) among diploma students in the Civil Engineering course. Therefore, 'My Advisee POs' has been carried out every semester for students who have obtained less than 50% of their PO attainment from the previous semester after completing the fundamental and intermediate courses through final assessments. The involvement of the Lecturer-in-Charge (LIC), Team Teaching, and Academic Advisor (AA) has been monitored closely by the Head of Studies and Outcome-Based Education (OBE) Committee to ensure the program is successful and the improvement of POs is visible. The LIC and Team Teaching are responsible in selecting and conducting one or half-day programs such as seminars/webinars/technical talks/simulations/competitions subjected to their POs. In sessions with the AA, students will receive guidance and support through the offer of appropriate advice including referral to appropriate support systems such as learning support program, online resources, counselling, referral to relevant academic or administrative points of contact, such as Buddy System Coordinator, Academic and Student Affair and extra tutorial support from the intervention program. This paper describes a survey tool, called the Program Effectiveness Survey, which can be used to evaluate and improve the effectiveness of the program. The tool provides feedback from students on the outcomes and understanding of the virtual webinar programs and how it can be improved. The survey was found to have a relatively high percentage, but reliability was below appropriate levels.

Keywords: Student Intervention Program, Program Outcomes (PO), Outcome-Based Education (OBE), Lecturer-in-Charge (LIC), Academic Advisor (AA)

1.0 OBJECTIVES

The objective of the Student Intervention Program (SIP) is to help students in enhancing their performances in twelve (12) POs that did not meet an average percentage of 50 as a minimum benchmark. The POs were evaluated from the laboratory reports, practical tests, final examinations, and other graded points related to their courses.

Several webinar activities have been conducted in SIP including topics titled 'Foundation Forensic: Case Study on Real Engineering Problem", 'Seminar in Water & Wastewater Engineering", 'Potential Tools & Skills of Empowering Versatile Future Young Engineer" and 'The Essential of Geotechnical Engineering Practice".

3.0 USEFULNESS

The students were gathered and briefed about the intervention plan through a consultation session between Academic Advisor and their students. After that, they identified the targeted students that needed to join the intervention program conducted by the school. In a session with the Academic Advisor, the achievement of PO attainment individually was highlighted and revealed to the students. The Academic Advisors assigned the targeted students who have less than 50 percent of their PO attainment to attend the program.

A one-day program by all divisions of civil engineering was designed to carry out the intervention. Five (5) webinars were arranged and delivered to the students by industry practitioners from each division; Structural and Material Engineering (STRUCM), Water Resources and Environmental Systems (WRES), Construction Business & Project Management (CBPM) and Geotechnical & Transportation Engineering (GEOTREN).

From the feedback of the webinars, the students had comprehension and made appropriate efforts in improving their results. Besides that, the students also have received new inputs from the speakers and were ready to learn new things and knowledge in enhancing their skills. It also helps them to get a better understanding of the contents of the webinars and have an awareness to relate it with program outcomes.

In addition, the students had the ability to use the knowledge from the webinars and be prepared to be taught in developing their knowledge, give a whole knowledge capability based on outcomes of the intervention program.

5.0 COMMERCIALISATION POTENTIAL

The SIP through My Advisee PO produces an innovative and systematic technique/method that improves the quality of teaching and learning delivery to the students, or that can be enhanced in new teaching pedagogy. Besides that, it will bring consultancy transfer partnerships between the University and industries in a new knowledge generated that improves the development of soft skills for students.

2.0 ADVANTAGES

Real-time engagement through the Question & Answer (Q&A) segment held at the end of each webinar session with the speaker has allowed students to directly interact and find out more about the topic discussed. Based on the observation throughout the sessions, students were active in asking questions that they would never normally get the chance to ask in the classroom. This certainly shows that students were actively engaged and focused throughout the sessions. The Q&A sessions can be effective in closing the gap between the content delivered by the speakers and what the students would like to gain from them. Positive feedbacks from the students regarding how the sessions have improved their understanding and ability to utilize the skills obtained from each topic discussed related to the PO indicate the effectiveness of the program.

In addition to the existing curriculum plan designed for the civil engineering program, this intervention program through the webinar sessions have been conducted five times and require compulsory participation from the targeted students for each session. Increasing the frequency of intervention by providing more than one session allows the students to receive more knowledge and improve the outcomes.

4.0 NOVELTY

The academic progression standards in engineering programs, particularly for the School of Civil Engineering, tends to be higher and requires students to not only achieve a minimum CGPA but also meet an average percentage of 50% as a minimum benchmark for student PO achievement upon graduation. The intervention program through multiple webinar sessions conducted by the School of Civil Engineering covers all POs which show scores lower than the benchmark

The program was designed to meet students' identified PO needs and gain more insight from experienced lecturers and industry players. The sessions delivered various approaches including apprenticeships, real-life simulations and enrichment of students' knowledge and practices in each field in civil engineering. Rapid technological advancements require graduates to have the skills when they enter the real work industry. Permeating industry-based knowledge and skills among students through this program have exposed them to the practical know-how to complement the theoretical knowledge they have gained previously. This is especially crucial to the graduated and final year students including those who are completing an internship in the final semester.

6.0 INVENTORS

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M.A.C Cruncher

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Abstract

Cost accounting is highly regarded as one of the most challenging subjects in business programs. Various studies around the world proved this phenomenon, with the new norms of online learning and teaching that have brought out more challenges to both students and educators. With a lack of close support from classmates, many students struggle to grab the essence of the lesson through online classes, and even worse, some of them are unable to perform the required calculation relevant to the topics under discussion. This is usually associated with a high failure rate, a pressing issue that deserves an intervention. Therefore, M.A.C Cruncher is developed to provide a self-help function in assisting students in preparing income statements under Marginal and Absorption Costing approaches. This self-help template is free and easy to be used by the students to immediately check whether their calculated answers are correct or not. Practically, M.A.C Cruncher aimed to provide a faster response to students' problems, as per its objective of self-help function. By utilizing the template, students could save time significantly and could move forward studying another lesson. Other than that, M.A.C Cruncher would be of assistance to educators as well. It can be used as teaching materials since the product is available online for use anytime, anywhere, using any internet-connected device. In the future, the usefulness of M.A.C Cruncher could be further expanded to include other types of calculation involving standard Pro-forma such as contract costing, process costing and overhead analysis sheet.

Keywords: Cost accounting, M.A.C Cruncher, students

M.A.C Cruncher





TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021

"Empowering Innovative Teaching & Learning"





YouTube Scan me

ABSTRACT

Cost accounting is highly regarded as one of the most challenging subjects in business programs. With a lack of close support from many classmates, struggled to grab the essence of the lesson through online classes and even worse, some of them are unable to perform the required calculation relevant to the topics under discussion. This is usually associated with a high failure rate, a pressing issue that deserves an intervention. Therefore, M.A.C Cruncher is developed to provide a self-help function in assisting students preparing income statements under Marginal and Absorption Costing approaches. This self-help template is free and easy to be used by the students to immediately check whether their calculated answers are correct or not. Practically, M.A.C Cruncher aimed to provide a faster response to students' problems, as per its objective of self-help function. By utilizing the template, students could save time significantly and could move forward studying another lesson. Other than that, M.A.C Cruncher would be of assistance to educators as well. It can be used as teaching materials since the product is available online for use anytime, anywhere using any internet-connected devices. In the future, the usefulness of M.A.C Cruncher could be further expanded to include other types of calculation involving standard pro-forma such as contract costing, process costing and overhead analysis sheet.



M.A.C Cruncher is part of The Cruncher©, which has been awarded Gold Medal in the International Virtual e-Content Development (e-ConDev 2021).

cruncher marginal & absorption costing

Preparing income statements now take lesser time than cooking a bowl of macaroni!



to serve as personal study assistant that helps students with topical tutorial questions



to enable students to immediately check the accuracy of their answers



to help students memorise the format for income statement under both approaches faster (learning by repetition)



easy and free to use engaging and interactive

accessible anytime, anywhere

(ு) a medium technological specification

enhance students' understanding of the topic

time saving and improve learning process

OBJECTIVES

ADVANTAGES

STUDENTS' RESPONSES ON THE USE OF M.A.C CRUNCHER

		BEFORE	AFTER
	general understanding on the Marginal and Absorption Costing topic	25%	80%
\$ <u>=</u>	ability to prepare income statements under Marginal Costing and Absorption Costing	20%	75%
5,3	ability to prepare Profit Reconciliation Statements for two income statements	18%	78%
₫	time spent to finish one tutorial question (two income statements + reconciliation)	45 minutes	15 minutes

USEFULNESS



encourage studentcentered learning



promote fun and engaging learning environment



utilize the technology to improve learning process



expose and prepare students towards digital workplaces



to be extend into a compilation of digital accounting templates especially for topics involving standard pro-forma such as contract costing, process costing and overhead analysis sheets



to be commercialized as teaching aids

NOVELTY

COMMERCIALIZATION

Wan Nurul Basirah Wan Mohamad Noor & Siti Noor Azmawaty Abd Razak Faculty of Accountancy, UiTM Cawangan Kelantan

EZ COL-CODE Cash Flows

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Abstract

Teaching the Statement of Cash Flows (SoCF) topic in the accounting course to students in higher learning education is sometimes challenging because students generally memorize the format of cash flows presentation instead of understanding the subject matter. Hence, in-depth learning is essential to overcome the lack of motivation among students and to enhance the application of the Malaysian Financial Reporting Standard (MFRS) 107 Statement of Cash Flows. Using the systematic step-by-step color-coding approach that uses the colorful multidimensional concept maps, students are taught to prepare EZ COL-CODE CASH FLOWS involving Six (6) Steps: 1) Preparing the SoCF template; 2) Labelling the opening and closing cash and cash equivalents balances in the Statement of Financial Position correctly; 3) Classifying and color-coding items differently in financial statements; 4) Reconstructing the T-Account to determine transactions with cash flows effect in financing and investing activities; 5) Determining cash flows from operating activities, and 6) Reviewing and transferring the relevant amount finalized. The lectures on EZ COL-CODE CASH FLOWS have been uploaded on YouTube. An open-ended survey on the effectiveness of using the EZ COL-CODE CASH FLOWS has been carried out on 105 students in the Semester of October 2020-February 2021. The findings show that respondents agreed on the differentiation of items in SoCF (83%), enhanced understanding (80%), and interest (76%). The EZ COL-CODE CASH FLOWS teaching approach has the potential to inculcate positive culture which is vital in Education 5.0@UiTM. By sharing EZ COL-CODE CASH FLOWS on YouTube, it would respond to the needs of a more fluid and organic curriculum, learning materials, and increase shared and distributed content for students' seamless learning in a pandemic environment. The EZ COL-CODE CASH FLOWS is a unique teaching pedagogy for the accounting program in UiTM which is commonly used in language learning based on literature.

Keywords: EZ COL-CODE Cash Flows, accounting course, pedagogy

EZ COL-CODE Cash Flows

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



YUSNALIZA HAMID (L)
PROF. DR. CORINA JOSEPH · SAIFULRIZAN NORIZAN
TINA STEPHEN ENGGONG · DR. RADZIAH MAHMUD

UNIVERSITI TEKNOLOGI MARA



ABSTRACT

Teaching the Statement of Cash Flows (SoCF) topic in an accounting course to students in higher learning education is sometimes challenging as students generally memorise the format of cash flow presentations instead of understanding the subject matter. Hence, in-depth learning is essential to overcome the lack of motivation among students and to enhance the application of the Malaysian Financial Reporting Standard (MFRS) 107 Statement of Cash Flows. Using the systematic step-by-step colour-coding approach that uses colourful multidimensional concept maps, students were taught to prepare EZ COL-CODE CASH FLOWS involving six (6) steps: 1) Preparing the SoCF template; 2) Labelling correctly the opening and closing cash and cash equivalent balances in the Statement of Financial Position; 3) Classifying and colour-coding items differently in financial statements; 4) Reconstructing the T-Account to determine transactions with cash flows' effects in financing and investing activities; 5) Determining cash flows from operating activities, and; 6) Reviewing and transferring the relevant amount finalised. Lectures on EZ COL-CODE CASH FLOWS were uploaded on YouTube. An open-ended survey on the effectiveness of using the EZ COL-CODE CASH FLOWS was carried out among 105 students from the October 2020-February 2021 semester. The findings show that the respondents agreed with differentiation of items in SoCF (83%), experienced enhanced understanding (80%), and found the subject to be interesting (76%). The EZ COL-CODE CASH FLOWS teaching approach has the potential to inculcate a positive learning culture which is vital in Education 5.0@UiTM. Also, sharing the EZ COL-CODE CASH FLOWS learning to cater to the challenges of learning during a pandemic. The EZ COL-CODE CASH FLOWS is a unique teaching pedagogy for the accounting program in UiTM, which is also commonly used among language learners based on literature.

OBJECTIVES

- To inspire deep learning using a systematic step-by step colour-coding approach.
- To provide solutions using scientific skills to accounting issues and problems.
- To display practical skills in accounting tasks for relevant organisations.
- To improve the level of understanding and competency in preparation of the Statement of Cash Flows among accounting students.

ADVANTAGES

- The EZ COL-CODE CASH FLOWS approach helps students distinguish the items between operating activities, investing activities, and financing activities easily.
- The EZ COL-CODE CASH FLOWS approach assists students to attain a better understanding on the function of each item in the Statement of Cash Flows
- The EZ COL-CODE CASH FLOWS approach helps students minimise errors in the preparation of Statement of Cash Flows.
- The EZ COL-CODE CASH FLOWS approach makes learning more fun and enjoyable as it can stimulate the visual senses of the students and ensure better retention of knowledge.

USEFULNESS

The EZ COL-CODE CASH FLOWS motivates students to learn financial reporting in an interesting manner, enhances students' understanding in the preparation of statements of cash flows, assists students in the preparation of statements in a more systematic way, is accessible to local and international students, is easy to apply, and is user friendly and colourful.

NOVELTY

The use of EZ COL-CODE CASH FLOWS is a unique approach in learning Statement of Cash Flows (SoCF) for accounting students as it is commonly used in language-based learning environments but not in accounting. Introducing this will be a breakthrough as such an approach is rarely used in accounting hence showing the significance of this method.

COMMERCIALISATION

The documentation of EZ COL-CODE CASH FLOWS approach in a form of a guide book or e-book has the potential to be commercialised and sold to accounting students locally and internationally.

Excellent Explanation with Excel

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Abstract

Pandemic Covid-19 has forced mankind to change their social activities instantaneously. Higher institution teaching and learning activities were also challenged by the pandemic and it surely required drastic measures to ensure educational activities continue. Universiti Teknologi MARA (UiTM) has decided to carry on its teaching and learning activities via open and distance learning (ODL). However, most of the lecturers as well as the students were not well trained and well equipped in handling the forced shift from the regular face-to-face teaching and learning to ODL. Getting familiar with new online teaching platforms was mostly a hassle along with finding new teaching techniques to enable students to understand accounting calculation as similar to classroom practices. In minimizing the hassle of handling the technology without sacrificing students' needs for understanding, Microsoft Excel was utilized to assist explanation of accounting calculation. MS Excel is considered to be appropriate since both lecturers and students were familiar with the software way before the pandemic outbreak. In applying this teaching technique, the lecturer needs to show the accounting calculation in MS Excel. To ensure the 'Review' function can be utilized for further explanation, the calculation that requires explanation needs to be written in a separate cell. When students need to identify how each figure is derived then they can place the cursor on the related cell to enable the reviewers' comments to appear. If the students wanted to print the calculations together with the explanation, they can choose the 'Show All Comments' function to enable all explanations to appear. Even though it was derived from familiar software, the lecturer managed to utilize the functions available in the software to provide a teaching technique that is suitable and easily applicable to provide better accounting calculation and explanation that is usable during the ODL process.

Keywords: MS Excel, accounting calculation, pen and distance learning (ODL)

Excellent Explanation with Excel

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



TITLE: EXCELLENT EXPLANATION WITH EXCEL

(TALPI_69B)

ABSTRACT

Pandemic Covid-19 has forced mankind to change their social activities instantaneously. Higher institution teaching and learning activities were also challenged by the pandemic and it surely required drastic measures to ensure educational activities continue. Universiti Teknologi MARA (UiTM) as well has decided to carry on its teaching and learning activities via open and distance learning (ODL). However, most of the lecturers as well as the students were not well trained and well equipped in handling the forced shift from the regular face-to-face teaching and learning to ODL. Getting familiar with new online teaching platforms such as Google classroom, Google Meet was mostly a hassle along with finding new teaching techniques to enable students to understand accounting calculation as similar to classroom practices. In minimising the hassle of handling the technology without sacrificing students' needs for understanding, Microsoft Excel was utilised to assist explanation of accounting calculation. MS Excel is considered to be appropriate since both lecturers and students are familiar with the software way before the pandemic outbreak. The mathematical functions offered by MS Excel ease the accounting calculation process. Furthermore, other functions such as 'Review' allowed the lecturers to include detail explanations alongside each amount calculated.

1.0 OBJECTIVES

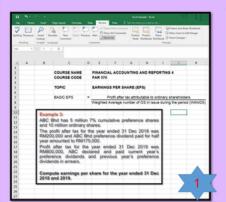
- To minimise the hassle of handling new software and technology in finding new teaching techniques to enable students to understand accounting calculation during ODL
- 2. To ensure students' understanding in learning accounting calculation is enhanced or at least similar to classroom practices.

2.0 ADVANTAGES

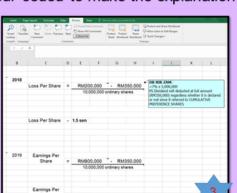
- 1. This teaching technique utilised MS Excel that are well-known by lecturers as well as students
- MS Excel is user friendly, easy to use and no additional training seems to be necessary in handling it
- MS Excel is readily available since it is provided in the Microsoft package.
- 4. Students can print the explanation and use it promptly as compared to video recording that they need to spend time to listen until the end of the video to understand the accounting calculation
- 5. Unlike limited space in MS Word and MS Powerpoint, MS Excel is a spreadsheet that provide greater and wider space suitable for the accounting calculation and explanation.

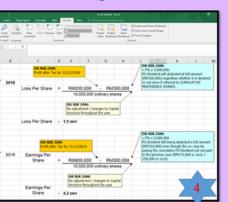
3.0 USEFULNESS

In applying this teaching technique, the lecturer need to show the accounting calculation in MS Excel instead of MS Powerpoint or MS Word that are commonly used earlier. To ensure the 'Review' function can be utilised for further explanation, the calculation that required explanation need to be written in separate cell. When students need to identify how each figure is derived then they can place the cursor on the related cell to enable the reviewer comments to appear. If the students wanted to print the calculations together with the explanation, they can choose the 'Show All Comments' function to enable all explanation to appear. Since MS Excel is a well-known software, then lecturers and students are very familiars with most of its functions including mathematical functions. Despite the explanation provided by lecturers, students can also add their own understanding as another reviewer's comments. Each of the comment can also be colour-coded to make the explanation more interesting and attractive.









5.0 COPYRIGHT

The idea has been
Submitted for application
of copyright through
UiTM System

IP Application Code:

CR00502



4.0 NOVELTY

Even though it was derive from a familiar software i.e. MS Excel, the lecturer managed to utilise the functions available in the software to provide a teaching technique that are suitable and easily applicable to provide better accounting calculation and explanation that is usable during the open and distance learning process.

6.0 COMMERCIALISATION POTENTIAL

The idea put forward here can also be applicable to other accounting calculation in other financial accounting and reporting courses. Other than applicable for teaching students in universities, this idea can also be applicable in preparing module for assisting microenterprises in preparing their businesses accounting records with minimum supervision by the accountants.

7.0 INVENTORS

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Using Blinkist Application to Enrich ESL Learners' Vocabulary Acquisition and Lexical Knowledge

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Abstract

Vocabulary has proved to play a pivotal role in enhancing learners' verbal ability and writing skills regardless of proficiency levels, and it is one of the core characteristics in the success of second language (L2) proficiency. Known as the building block of thought, vocabulary is perceived as the 'lubricant' of language that allows a smooth flow of speech and reading fluency. However, learners who lack L2 vocabulary always shun reading as much as possible, particularly those with limited English proficiency. This is because their inability to comprehend many unknown words encountered in a text impedes them from grasping the gist of the contents, thus putting them in a vicious cycle: lack of words hampers reading, and lack of reading is mainly caused by lack of vocabulary. Hence, this study is aimed at discovering the effectiveness of Blinkist application in improving low-proficient learners' vocabulary acquisition and lexical knowledge over a period of six weeks. In this study, Bialystok's Model of Second Language Learning, Rumelhart's Interactive Reading Model, and a Multi-faceted Comprehensive Vocabulary Instructional Program (MCVIP) form the theoretical underpinnings for using Blinkist application as a tool to increase vocabulary gain and enhance lexical knowledge. The analysis of this study was elicited from two corpora: weekly vocabulary tasks and essay writing. An ESL undergraduate class has participated in this study, forming 30 students in total. The findings indicate that students have demonstrated a significant improvement in their vocabulary gain and word knowledge overall, resulting in the good use of high-level vocabulary and word choice in their essay writing. The implications of these findings are explored, particularly the view that word formation skills should be taught in concert with different categories of parts of speech in order to have better control of grammar and proper use of words contextually in their writing.

Keywords: ESL learners, vocabulary acquisition, lexical knowledge, second language learning, English proficiency

Using Blinkist Application to Enrich ESL Learners' Vocabulary **Acquisition and Lexical Knowledge**





Blinkist

USING BLINKIST APPLICATION TO ENRICH ESL LEARNERS' **VOCABULARY ACQUISITION AND LEXICAL KNOWLEDGE**

ABSTRACT

Vocabulary has proved to play a pivotal role in enhancing learners' verbal ability and writing skills regardless of proficiency levels, and it is one of the core characteristics in the success of second language (L2) proficiency. Known as the building block of thought, vocabulary is perceived as the 'lubricant' of language that allows smooth flow of speech and reading fluency. However, learners who lack L2 vocabulary always shun reading as much as possible, particularly those with a limited English proficiency. This is because their inability to comprehend many unknown words found in a text impedes them from grasping the gist of the contents, thus putting them in a vicious cycle: lack of words hampers reading, and lack of reading is mainly caused by lack of vocabulary. This study is aimed at discovering the effectiveness of Blinkist application in improving low-proficient learners' vocabulary acquisition and lexical knowledge over a period of six weeks. In this study, Bialystok's Model of Second Language Learning, Rumelhart's Interactive Reading Model, and a Multi-faceted Comprehensive Vocabulary Instructional Program (MCVIP) form the theoretical underpinnings for using Blinkist application as a tool to increase vocabulary gain and enhance lexical knowledge. The analysis of this study was elicited from two corpora: weekly vocabulary tasks and an essay writing. An ESL undergraduate class has participated in this study, forming 30 students in total. The findings indicate that students have demonstrated a significant improvement in their vocabulary gain and word knowledge overall, resulting in the good use of high-level vocabulary and word choice in their essay writing. The implications of these findings are explored, particularly the view that word formation skills should be taught in concert with different categories of parts of speech in order to have better control of grammar and proper use of words contextually in their writing.

1.0 OBJECTIVES

- 1 To integrate the conventional teaching of L2 reading and vocabulary with the use of a free mobile application
- To provide a linguistically-rich platform for students to learn vocabulary and reading using a mobile app
- To implement the use of Blinkist in a CEFR A2 language class to enhance learners' vocabulary acquisition and lexical knowledge

3.0 USEFULNESS



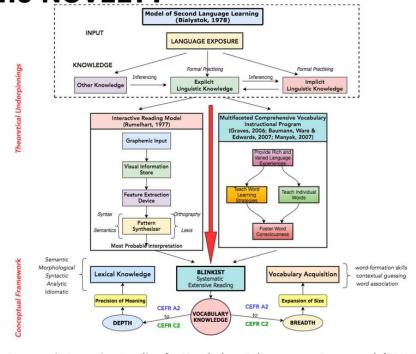
5.0 COMMERCIALISATION **POTENTIAL**

- ☐ Teaching Module
- ☐ Mobile Classroom Lesson
- ☐ Learning Framework
- ☐ Guided Vocabulary Analysis Task Sheet

2.0 ADVANTAGES

- Student-centered Learning
- Systematic Learner ☐ Independent Word Learner
- Guided and Structured Lesson
- Analytical and Critical Reader and Thinker

4.0 NOVELTY



Systematic Extensive Reading for Vocabulary Enhancement Framework (SERVE) (Paiman & Wan Mohamad, 2021)

6.0 INVENTORS

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Improving Management Accounting Student's Performance Using Video Illustration

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Suzana San
Azilawati Abdullah @ Abd Aziz
Rosliza Abu Bakar
Siti Nor Adawiah Hussin

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Abstract

Costing and Management Accounting subjects are involved with techniques and calculation. It's very difficult to make sure the students understand the subject matter. Open Distance Learning (ODL) has been introduced to prevent the transmission of the Covid-19 virus. The students are facing the challenges of unexpectedly switching to online classes. They are having difficulties in understanding concepts and techniques. Besides that, their internet coverage also interrupted real-time class. Some of the students may face an inconvenient study environment, therefore they failed to attend online classes. To solve these problems video illustration techniques are implemented. The objectives of this technique are to provide better understanding by providing step-by-step illustrations and explanations and to overcome the interruption of real-time class due to internet connectivity and inconvenient study environment. There are 4 steps involved to adopt this technique. In the first step, notes are given to students one week before class. Second step, video explanation on notes and illustration questions are given a day before online class. Therefore, during class they have all the downloaded materials and the lecturer can start the class on time. Next step, video illustration and tutorial questions are given at the end of the class. Lastly, the lecturer will check the answer and discuss the solutions. After the lecturer posts, the video illustration and students answer the tutorial question, the process of online checking through WhatsApp group or telegram takes place. Therefore, the lecturer can give immediate feedback or respond to any inquiries. It can increase students' satisfaction and understanding of the subject matters. This technique is proven to excellent result for MAF551, where more than 40% score A for Final Assessment for semester May-August 2021.

Keywords: Costing, Management Accounting, video

Improving Management Accounting Student's Performance Using Video Illustration





Improving Management Accounting Student's Performance Using Video Illustration

ABSTRACT

Costing and Management Accounting subjects are involved with techniques and calculation. It's very difficult to make sure the students understand the subject matter. Open Distance Learning (ODL) has been introduced to prevent the transmission of Covid-19 virus. The students are facing the challenges of unexpectedly switching to online classes. They are having difficulties in understanding concepts and techniques. Besides that their internet coverage also interrupted real time class. Some of the students may face an inconvenient study environment, therefore they failed to attend online classes. To solve these problems video illustration techniques are implemented.

1.0 OBJECTIVES

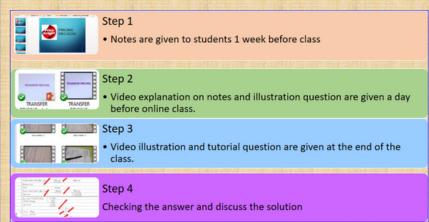
- 1. To provide better understanding by providing step by step illustration and explanation.
- To overcomes the interruption of real time class due to internet connectivity and inconvenience study environment.

2.0 ADVANTAGES

- Students can repeat video illustration at their convenience time and place, to enhance their understanding.
- Cost savings in term of data usage in online learning.

3.0 USEFULNESS

4 steps to apply this technique



This technique contributes to excellent result for MAF551, more than 40% score A for Final Assessment during semester May – August 2021.

5.0 COMMERCIALISATION POTENTIAL

This technique can be applied for all Costing and Management Accounting subjects.

4.0 NOVELTY

After lecturer post the video illustration and students answer the tutorial question, the process of online checking through whatsapp group or telegram take place. Therefore, lecturer can give immediate feedback or respond for any inquiries. It can increase student's satisfaction and understanding on the subject matters.

Okay madam Sanaya Today Assalamualaikum madam, saya Shafiqah daripada AC22038. Alhamdullilah saya dapat A untuk subjek MAF551. Terima kasih atas sepala yang dajak terima kasih banyak senangkan kami dengan vidoo video madam yang ringkas tapi senang faham. Harap nanti sem sem atas saya dapat jumpa madam lagi Jaga dir ye madam, semoga dipermudahkan segala urusan Versalam 12.45 PM Alhamdulullah 12.45 PM Tahniah 12.45 PM Tahniah 12.45 PM Versalam Versalam Segala Urusan Dengalam Segala Urusan Dengalam Segala Urusan Dengalam Segalam Segalam

6.0 INVENTORS

- 1. Syuhaila Razak
- 2. Dr. Nik Zam Nik Wan
- 3. Suzana San
- 4. Azilawati Abdullah @ Abd Aziz
- 5. Rosliza Abu Bakar
- 6. Siti Nor Adawiah Hussin

FACULTY OF ACCOUNTANCY UITM CAWANGAN KELANTAN

TALPI71B

Modelling the Used of Social Media as Medium to Create Learners Behaviorial, Emotional and Cognitive Engagement in Teaching and Learning

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Abstract

This study is an attempt to examine the application and usefulness of social media used as a medium to create learners' behavioral, emotional, and cognitive engagement in transferring the resources and interaction with students and in higher education institutions across the boundary wall. This empirical study is based on the focus groups conducted among lecturers at university, cognizing students' perception of social media through collaborative learning, interactivity with lecturers, peers, and its significant impact on students' academic performance. Connecting with each other comes to us more easily now that we can just tap away on a keyboard and chat with a person who lives over 3000 miles away. Finding information knows no boundaries with Google on every computer in the world. The study revealed that online social media used for collaborative learning had a significant impact on interactivity with peers, lecturers, and online knowledge sharing behavior impact on students' academic performance. Novelty to this finding, it would be valuable to mention that the use of online social media for collaborative learning facilitate students to be more engaging, creative, dynamic and research-oriented

Keywords: Social media, learners behaviorial emotional, cognitive engagement

Modelling the Used of Social Media as Medium to Create Learners Behaviorial, Emotional and Cognitive Engagement in Teaching and Learning



Integrating Online Teaching Tools in Providing Better Explanations for Non Accounting Students

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Abstract

Open and Distance Learning (ODL) has grown into an important global strategy in resolving problems of access to education (UNESCO). ODL programs have their own unique problems. Some of the major problems are the high rate of student drop-out and late completion of programs. The challenges are found at three levels: individual student, instructional and institutional. These challenges also happened to the lectures and students especially teaching accounting subjects for non-accounting students. During the ODL session, lecturers faced difficulties in explaining the flow of the recording process due to limited teaching tools. Some of the non-accounting students also have difficulties in understanding the recording process without detailed explanations and proper illustration from the lecturers. To solve these problems, integrated online teaching tools are implemented in providing better explanations for non-accounting students. The objectives of this technique are to provide a better understanding of step by step of the recording process by providing detailed explanations together with the recording process flow using suitable online teaching tools and to assist the lecturers in explaining the recording process by using these tools. There are five steps to apply this technique. First, notes are uploaded in Google Classroom before the discussion. Second, a general explanation of the notes is conducted in the Google Meet session. Third, hand-on discussions for tutorial questions are used by integrating of several teaching tools such as PowerPoint, whiteboard.fi and google meet. Fourth, assign the tutorial question to the students for submission and fifth, students need to turn in the tutorial question via google classroom and the solution will be discussed together via the online platform. Therefore, this technique will increase the students' understanding and satisfaction on the subject. This technique is proven when the failure rate of a non-accounting subject (ACC030) is decreased during ODL semester

Keywords: Non Accounting Students, Open and Distance Learning, online teaching tools

Integrating Online Teaching Tools in Providing Better Explanations for Non Accounting Students





INTEGRATING ONLINE TEACHING TOOLS IN PROVIDING BETTER EXPLANATION FOR NON ACCOUNTING STUDENTS

ABSTRACT

During Online Distance Learning (ODL) session, lecturers faced difficulties in explaining the flow of recording process due to limited teaching tools. Some of non-accounting students also having difficulties in understanding recording process without details explanation and proper illustration from the lecturers. To solve these problems, an integrated online teaching tools are implemented in providing better explanation for non-accounting students. There are five steps to apply this technique. First, notes are uploaded in Google Classroom before discussion. Second, general explanation of the notes is conducting in Google Meet session. Third, hand-on discussion for tutorial questions are using by integrating of several teaching tools such as power point, whiteboard.fi and google meet. Fourth, assign tutorial question to the students for submission and fifth, students need to turn in the tutorial question via google classroom and solution will be discussing together via online platform. Therefore, this technique will increase the students' understanding and satisfaction on the accounting subject.

1.0 OBJECTIVES

- To provide better understanding of recording process topic by providing detailed explanation together with the flow of recording process using suitable online teaching tools.
- To assist the lecturers in explaining the recording process by using suitable online teaching tools.

2.0 ADVANTAGES

- This teaching technique can enhance students' understanding for recording process topic so that they can solve the tutorial questions on their own.
- This technique will assist lecturers in providing detail and comprehensive explanation for recording process topic easier using combination teaching approach which are Google Classroom, Google Meet and Whiteboard.fi

3.0 USEFULNESS

Steps to apply this technique:



Step 1

Provide teaching notes to the students in Google Classroom before class.



Step 2

General explanation of notes was conducted in Google Meet session during online class.



Step 3

Hands-on discussion using integrated teaching tools (Google meet, Microsoft word, excel, whiteboard.fi)



Step 4

Assign tutorial questions to the students for submission in Google Classroom.



Step 5

The submitted questions will be discussed in the next online session by using integrated online teaching tools.

4.0 NOVELTY

➤ Hands-on discussion of tutorial question will improve students' understanding on recording process topic during ODL class as compared to video presentation without hands-on discussion.

5.0 COMMERCIALISATION POTENTIAL

This technique can be applied for other Financial Accounting subjects.

6.0 INVENTORS

- 1. Siti Nor Adawiah Hussin
- 2. Dr. Nik Zam Nik Wan
- 3. Noraida Saidi
- 4. Azilawati Abdullah @ Abd Aziz
- 5. Syuhaila Razak
- 6. Suzana San

FACULTY OF ACCOUNTANCY
UITM CAWANGAN KELANTAN
(DECISTRATION ID: TAI DI73R)

(REGISTRATION ID: TALPI73B)

iMoFE

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Abstract

The purpose of the project is to enhance the existing teaching and learning for one of the chapters in the Administrative Operation Systems (ASM553) course, offered to the Bachelor of Office Systems Management (BA232) students. The aim of this project is to develop appealing and engaging teaching materials in covering Topic 5 (Office Furniture and Equipment). This topic is quite challenging since the allocation of time is only 4 hours (1 week) but the coverage is quite substantial. Furthermore, the usage of traditional PowerPoint slides is seen as tedious and synchronous online teaching delivered live usually results in internet connectivity issues among students. Learning the topic via Open and Distance Learning (ODL) amidst the COVID-19 pandemic also hinders students' understanding because they are not able to see the actual office furniture and equipment from the comfort of their homes. Therefore, an alternative approach is needed to facilitate the process. The idea of compiling instructional material that integrates a collection of infographic, case studies and augmented realities on one platform not only show the uniqueness of this project but also contributes to the learning process itself. By utilizing iMoFE, the lecturers are able to convey the syllabus easily because there are suggested instructions ready to be used by them. This learning approach also aids students by providing a simple and user-friendly platform that enables the students to explore the topics at their own convenient time. The students will be able to study the topic by following the step-by-step instructions, learning infographics, interacting online and then, testing their comprehension by completing the hands-on activities arranged for them. It is hoped that iMoFE, will be used as instructional material to support the lecturers in asynchronous interaction and enrich students learning experience.

Keywords: iMoFE, Open and Distance Learning, Bachelor of Office Systems Management

iMoFE



TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



TEACHING & LEARNING

ABSTRACT

The purpose of the project is to enhance the existing teaching and learning for one of the chapters in Administrative Operation Systems (ASM553) course, offered to the Bachelor of Office Systems Management (BA232) students. The aim of this project is to develop an appealing and engaging teaching materials in covering Topic 5 (Office Furniture and Equipment). This topic is quite challenging since the allocation of time is only 4 hours (1 week) but the coverage is quite substantial. Furthermore, the usage of traditional PowerPoint slides is seen as tedious and synchronous online teaching delivered live usually results in internet connectivity issues among students. Learning the topic via Open and Distance Learning (ODL) amidst COVID-19 pandemic also hinders students' understanding because they are not able to see the actual office furniture and equipment from the comfort of their home. Therefore, an alternative approach is needed to facilitate the process. The ideas of compiling instructional material that integrates a collection of infographic, case studies and augmented realities on one platform not only show the uniqueness of this project but also contributes to the learning process itself. By utilizing iMoFE, the lecturers are able to convey the syllabus easily because there are suggested instructions ready to be used by them. This learning approach also aids students by providing a simple and user-friendly platform that enables the students to explore the topics at their own convenient time. The students will be able to study the topic by following the step-by-step instructions, learning infographics, interacting online and then, testing their comprehension by completing the hands-on activities arranged for them. It is hoped that iMoFE, will be used as instructional material to support the lecturers in asynchronous interaction and enrich students learning experience.

1.0 OBJECTIVES

- To develop an attractive and interesting instructional course material that will facilitate teaching and learning experience by providing a better platform.
- To enhance the lecturer's capability in teaching the topic and provide the possibilities to demonstrate things that cannot be shown with physicals tools within the classroom setting.
- To accommodate students in learning the theoretical aspect of office furniture and equipment in a more realistic and meaningful manner.

2.0 ADVANTAGES

The various materials developed in iMoFE increase the teaching quality because it enables the lecturer to deliver the topic effortlessly especially during ODL semester.

The instructional materials are effective to stimulate students understanding due to its interactive and asynchronous features.

The platform used English Language as a medium of delivery and can be easily accessed globally online

3.0 USEFULNESS



iMoFE is useful to the lecturers and students in teaching and learning the topic (Office Furniture and Equipment) without difficulty.



iMoFE also can be used by office personnel and executive who are really enthusiastic to gain knowledge regarding the management of equipment and furniture in an office.

5.0 COMMERCIALISATION POTENTIAL

- 1. IPTA, IPTS, UiTM Franchise College or any other related institutions that offer the similar topic in their program.
- 2. Office personnel and executive working in government and private agencies that involve with managing Office Furniture and Equipment.

INSTRUCTIONAL MATERIAL FOR OFFICE FURNITURE AND EQUIPMENT

4.0 NOVELTY

- 1. This is a research-based project to improve students' understanding in learning Office Furniture and Equipmenttopic.
- 2. The ideas of integrating the infographics notes, case studies, self-assessment quizzes and augmented reality materials in one platform in teaching this topic reflects the novelty and uniqueness of iMoFE.
- 3. This project also important in improving students' understanding and engagement through interactive multimedia features (infographics, chat box, forum, augmented reality materials) which promote the concept of Quality Education (SDG 4) and Industry, Innovation and Infrastructure (SDG 9).

6.0 INVENTORS

Naliza binti Solat Noor Dalila Musa Nik Mohd Faris Nik Min Dr. Mohd Zulkifli bin Abdullah Dr. Siti Noraini Mohd Tobi PM Dr. Siti Noorsuriani Maon

VIRTALK: A Virtual Talent Talk Where Your Talent is Unlock

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Abstract

The Covid-19 threat has enhanced the technology's usefulness and pushed higher education institutions to adopt a new culture in the process of digital teaching and learning in the development of students' communication abilities. Investing in high-quality people requires exceptional communication skills, which are in line with the advancement of dynamic and flexible digital technologies. While university attempts to enhance student communication skills via digital media are necessary, the level of basic skills sets and the development of communication skills remains concerning. Therefore, Virtual Talent Talk (VIRTALK) was developed to assist students in improving their communication skills while also enhancing the development of critical thinking skills, decision making, digital skills, social skills, and group discussion participation. Furthermore, VIRTALK intends to help students develop brain functions such as cognitive, emotional, and psychomotor abilities, as well as core basic skill sets, in order to maximize their online learning experience through group discussions and problem-solving. The VIRTALK requires each group to engage in and exchange knowledge on major contemporary topics in order to fulfill the academic and industry's fundamental theoretical, and practical demands. Participants' performance on VIRTALK was evaluated in terms of introduction, substance, fluency and clarity, audio-visual, non-verbal communication, and adapting delivery to the audience's expectations. 66 participants in the VIRTALK were asked to complete an online survey in order to get their feedback. The findings reported that the higher the students' communication skills, the greater the critical thinking and continuous learning abilities will be. Overall, VIRTALK's implications have improved students' communication skills, basic skills sets and cognitive, affective and psychomotor. VIRTALK is a long-term project engaging a diverse group of students, industry participants, and communities, all of whom are vital to the development of strong communication skills to contribute to the progress of a sustainable country for talent competitiveness.

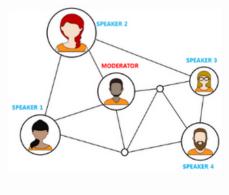
Keywords: Virtual Talent Talk (VIRTALK), digital technologies, communication abilities

VIRTALK: A Virtual Talent Talk Where Your Talent is Unlock

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



VIRTALK: A Virtual Talent Talk Where Your Talent Is Unlock



ABSTRACT

The Covid-19 threat has enhanced the technology's usefulness and pushed higher education institutions to adopt a new culture in the process of digital teaching and learning in the development of students' communication abilities. Investing in high-quality people requires exceptional communication skills, which are in line with the advancement of dynamic and flexible digital technologies. While university attempts to enhance student communication skills via digital media are necessary, the level of basic skills sets and the development of communication skills remains concerning. Therefore, Virtual Talent Talk (VIRTALK) was developed to assist students in improving their communication skills while also enhancing the development of critical thinking skills, decision making, digital skills, social skills, and group discussion participation. Furthermore, VIRTALK intends to help students develop brain functions such as cognitive, emotional, and psychomotor abilities, as well as core basic skill sets, in order to maximise their online learning experience through group discussions and problem-solving. The VIRTALK requires each group to engage in and exchange knowledge on major contemporary topics in order to fulfil the academic and industry's fundamental theoretical, and practical demands. Participants' performance on VIRTALK was evaluated in terms of introduction, substance, fluency and clarity, audio visual, non-verbal communication, and adapting delivery to the audience's expectations. 66 participants in the VIRTALK were asked to complete an online survey in order to get their feedback. The findings reported that the higher the students' communication skills, the greater the critical thinking and continuous learning abilities will be. Overall, VIRTALK's implications have improved students' communication skills, basic skills sets and cognitive, affective and psychomotor. VIRTALK is a long-term project engaging a diverse group of students, industry participants, and communities, all of whom are vital to the development of strong communication skills to contribute to the progress of a sustainable country for talent competitiveness.

ADVANTAGES

- Complement teaching & learning via digital platforms during Covid-19
- Improving students' digital knowledge & skills
- Greater Communication Skills
- Greater basic skills set
- Achieving UiTM's Performance Indicator (PI)-Communication (PI40)

 Comprehensive Talent-CAP
- Module

NOVELTY

- A new educational innovation via digital platforms during Covid-19 pandemic
- Greatest virtual-based talk on current
- Higher flexibility and dynamic of students' communication & basic skill sets development
- Complement Talent-CAP Module components (Talent Race-Talent Feud-Talent Mind-Talent Gram-Talent

OBJECTIVES

To develop a virtual talent talk as a new educational innovation for a higher education institution students

To improve students' level of communication skills & basic skill sets via a digital platform

To strengthen students' brain functions (cognitive, affective & psychomotor-CAP)

> IDRIS OSMAN (DR.) (LEADER) NURSAADATUN NISAK AHMAD (DR.) SUHAILAH KASSIM **SURAYA HAMIMI MASTOR** MOHD ZAILANI OTHMAN

Senior Lecturers Faculty of Business and Management UiTM Cawangan Melaka Kampus Bandaraya Melaka Cawangan Selangor Kampus Puncak Alam

USEFULNESS

- Aligns with HRM554 (Talent Recruitment) & Selection) learning outcomes
- Complement teaching & learning via digital platform during Covid-19
- Students display greater communication skills & knowledge exchange on current topics
- Development of greater basic skill sets (e.g. critical thinking, teamwork, creativity, innovative, problem-solving) and cognitive, affective & psychomotor (CAP)

PUBLICATIONS COMMERCIALISATION

• Individual Level - Full-time & part-time students (Public & Private Institutions) & School; Industrial practitioners;

POTENTIALS

Communities • Firm Level – Talent-CAP Module (Handbook); Product research & development; Intellectual Property (2

Copy rights); Performance Indicator (PI)

- Industry Level Industrial linkages & collaboration; Industrial grant; Basic skills set index (BSSI)
- National Level Ministry of Higher Education (MOHE) grants; Subject Matter Experts (SMEs) for talent development
- Mat Zain, N. H., Osman, I., Samuel, R., Kassim, S., Mastor, S. H. & Borhan, H. (2021). Talent Cap Module: The Implementation of Digital and Non-Digital Assessment Game in Collaborative Learning Environment. International Journal of Advanced Technology and Engineering Exploration, 8(76), http://dx.doi.org/10.19101/IJATEE.2020.762184 (Scopus Q4)
- Osman, I., Mat Zain, N. H., Samuel, R., Kassim, S., Mastor, S. H. & Borhan, H. (2020). Sustaining The Impact of Talent-Cap Module for Learners' High Performance Invention, Innovation & Design Exposition 2020 (IIDEX 2020), UiTM Shah Alam, Selangor (Exhibition)
- Osman, I., Mat Zain, N. H., Samuel, R., Kassim, S., Mastor, S. H. & Borhan, H. (2019). Enhancing Learners' Performance through Students' Learning-KSAOs Match using Talent-CAP Module Melaka International Intellectual Exposition 2019 (MIIEX 2019), UiTM Cawangan Melaka (Exhibition)

AWARDS &

RECOGNITION

- Sustaining The Impact of Talent-CAP Module for Learners' High Performance Invention, Innovation & Design Exposition 2020 (IIDEX 2020), UiTM Shah Alam, Selangor (Silver Award)
- Enhancing Learners' Performance through Students' Learning-KSAOs Match using Talent-CAP Module, MIIEX 2019, UiTM Cawangan Melaka, 6-8 Aug 2019 (Gold Award)
- Peningkatan Prestasi Akademik Bagi Kod Kursus HRM554 Melalui Talent-CAP Module, Konvensyen Kumpulan Inovatif & Kreatif 2019 (KIK 2019), UiTM Peringkat Zon Selatan, UiTM Cawangan Melaka, 28-29 Aug 2019 (Anugerah Emas)
- Inovasi Pengajaran & Pembelajaran, Peningkatan Prestasi Akademik Bagi Kod Kursus HRM554 Melalui Talent-CAP Module, Konvensyen Kumpulan Inovatif & Kreatif 2019 (KIK 2019), UiTM Peringkat Zon Selatan, UiTM Cawangan Melaka 28-29 Aug 2019 (Anugerah KIK Primer Terbaik)

Smarter Study Link 2021 (SSLi'21)

Noor Ain Mohd Noor
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Abstrak

Semenjak penularan virus Covid-19 melanda dunia termasuk Malaysia, hampir keseluruhan institusi pengajian tinggi dan sekolah menjalankan sesi pengajaran dan pembelajaran secara atas talian. Kaedah ini dilakukan bagi mengurangkan risiko jangkitan dalam kalangan para pelajar serta kakitangan setiap institusi pendidikan. Oleh itu, idea penciptaan Smarter Study Link (SSLi'21) ini adalah bertujuan sebagai one stop course access (pusat capaian kursus) untuk memudahkan para pelajar mengakses pelbagai maklumat mengenai kursus-kursus yang mereka pelajari di universiti. Maklumat tersebut termasuklah nota, aktiviti pembelajaran, video pengajaran, tugasan, jurnal, bahan rujukan dan kehadiran melalui satu pautan sahaja. Apa yang lebih menarik dengan SSLi'21 para pelajar boleh mengetahui peratus kehadiran terkini mereka dan boleh menilai tahap kefahaman mereka tentang kursus tersebut dengan hanya menjawab beberapa soalan dalam ruangan aktiviti pembelajaran. Dengan adanya SSLi'21 ini para pelajar tidak perlu lagi mengulangkaji pelajaran secara bersemuka bahkan SSLi'21 ini mampu membantu mereka melakukan persediaan dengan sangat efektif bagi menghadapi ujian atau peperiksaan akhir. Kesimpulannya, SSLi'21 membantu para pelajar melakukan pembelajaran kendiri tanpa menggunakan data internet yang banyak.

Kata Kunci:Smarter Study Link (SSLi'21), pelajar, pembelajaran kendiri

Smarter Study Link 2021 (SSLi'21)



TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



SMARTER STUDY LINK 2021 (SSLi'21)

PROJECT MEMBERS: NOOR AIN BINTI MOHD NOOR, NORANIZAH BINTI YUSUF, AEMY BIN AZIZ, NOORMUTHAAH BINTI MOHAMAD ALI ADAHA, NUR ADILAH BINTI AMIRUDDIN DAN NAZIRAH BINTI HAMDAN

UNIVERSITI TEKNOLOGI MARA, CAWANGAN SARAWAK

ABSTRAK

Semenjak penularan virus Covid-19 melanda dunia termasuk Malaysia, hampir keseluruhan institusi pengajian tinggi dan sekolah menjalankan sesi pengajaran dan pembelajaran secara atas talian. Kaedah ini dilakukan bagi mengurangkan risiko jangkitan dalam kalangan para pelajar serta kakitangan setiap institusi pendidikan. Oleh itu, idea penciptaan Smarter Study Link (SSLi'21) ini adalah bertujuan sebagai one stop course access (pusat capaian kursus) untuk memudahkan para pelajar mengakses pelbagai maklumat mengenai kursus-kursus yang mereka pelajari di universiti.

OBJEKTIF

Untuk membangunkan satu pautan (link) interaktif dalam proses pengajaran dan pembelajaran secara maya (open distance learning).

KELEBIHAN DAN POTENSI

- Memaksimumkan penggunaan kemudahan akaun Google yang disediakan oleh pihak UiTM kepada pelajar.
- Meningkatkan keupayaan Self-Directed Learning Abilities dalam kalangan pelajar.
- Maklumat / dokumen lebih selamat dan kekal

PEMBAHARUAN

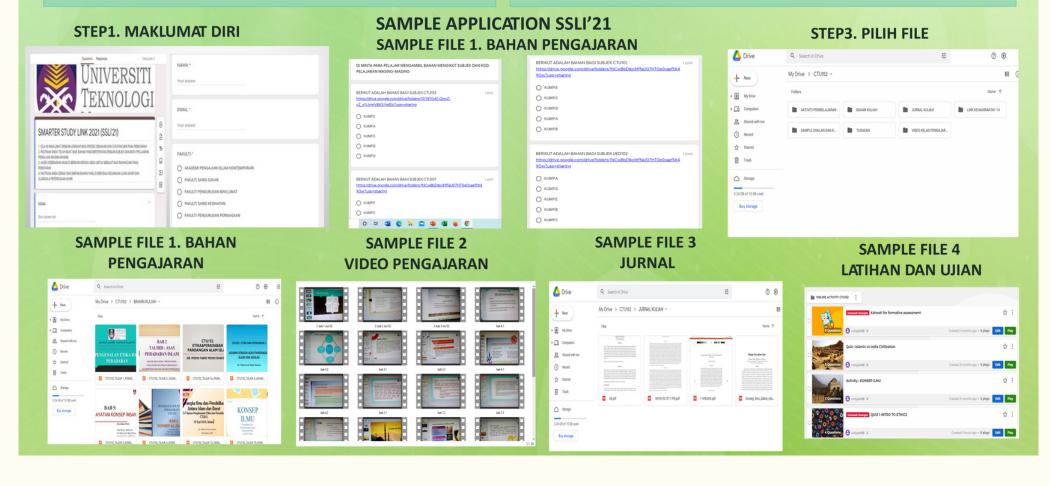
- Para pelajar mendapat notifikasi berkenaan tarikh penghantaran tugasan dan tarikh Ujian yang akan berlangsung. Tambahan lagi, notifikasi ini juga amat membantu para pensyarah dalam memastikan para pelajarnya menghantar tugasan-tugasan yang diberikan.
- Para pelajar boleh mengetahui peratus kehadiran terkini mereka pada folder link e-kehadiran.
- Mampu menilai tahap kefahaman dan pengaplikasian mereka tentang kursus tersebut melalui latihan

KEBERGUNAAN

- Memudahkan pelajar mengakses maklumat berkaitan kursus (nota, aktiviti pembelajaran, video pengajaran, tugasan, jurnal, bahan rujukan dan kehadiran) melalui satu pautan sahaja.
- Proses ulang kaji dapat dilakukan tanpa had masa dan tempat.
- Menjimatkan kos pengajaran, nota dan pembelajaran.

POTENSI PRODUK

Produk ini boleh dikomersialkan melalui penulisan bahan-bahan yang ditulis oleh pensyarah sama ada berbentuk digital atau buku. Pasaran bagi produk ini adalah pelajar universiti dan orang awam.



HSM572 Redesign & SMART Billing

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Abstract

HSM572 is a vital subject equipped with numeracy skills in a bachelor's degree in health administration offered by UiTM. In 2019, a study found that psychological reaction and difficulty level of course assessments were significantly correlated. In addition to that, a recent survey investigating feedback of students taking HSM572 revealed that 80% of students claimed they suffered from stress due to course assessments. The majority (90%) claimed that the subject was quite challenging and needed more guidance from instructors, especially for the Hospital Billing topic. Most of them (85%) agreed that they faced problems completing the group assignment and final exam. This course assessment raises concerns to be addressed. Therefore, this project aims to propose a redesign of course assessment for HSM572 in line with CLO, PLO, MOHE, and MQF2 and develop the comprehensive manual of hospital billing flow chart and calculation template called SMART Billing. This project is a pioneer in developing the SMART Billing that will benefit several parties, primarily students, instructors, IPT, hospital and insurance agents, and the public. The project's expected outcomes include collaborating with hospitals and insurance in commercializing this project for public purposes. Besides, the updated CAP and CI will become an essential reference to other IPTA and IPTS since Bachelor of Health Administration offered this subject, Faculty of Business and Management, UiTM Puncak Alam only. Based on the feedback on the usefulness of the SMART Billing, 100% (50 respondents including students, instructors, hospital staff, insurance agent and the public) agreed that the SMART Billing is a comprehensive manual, easy to use, and provide potential benefits. They considered that the SMART Billing should proceed for commercialization to all users. This project has initially reviewed by the health administrator of Hospital Pantai, Ampang, and has registered under IPO.

Keywords: HSM572, Bachelor's degree in health administration, SMART Billing

HSM572 Redesign & SMART Billing



Abstract

HSM572 is a vital subject equipped with numeracy skills in Bachelor's degree of Health Administration offered by UiTM. In 2019, a study found that psychological reaction and difficulty level of course assessments were significantly correlated. A recent survey investigating feedback of students taking HSM572 revealed that 80% of students claimed they suffered from stress due to course assessments. Majority (90%) claimed that the subject was quite challenging and needed more guidance from instructors while 85% agreed that they faced problems completing the group assignment and final exam. This project aims to propose a redesign of HSM572's course assessment in line with CLO, PLO, MOHE, and MQF2 and to develop comprehensive manual of hospital billing flow chart and calculation template called SMART Billing. This SMART Billing project is pioneer that will benefit many parties (students, instructors, IPTs, hospitals and insurance agents) and the expected outcome is to collaborate with hospitals and insurance companies for commercialization. The updated CAP and CI of HSM572 will become an essential reference to others IPTs since it is only offered in Bachelor's Degree of Health Administration in UiTM Puncak Alam only. An initial survey on the usefulness of SMART Billing conducted among 50 respondents (100%) has agreed SMART Billing is a comprehensive manual which is easy to use and provide potential benefits. This project has initially reviewed by the health administrator of Hospital Pantai, Ampang, and registered under IPO.

Objectives

- To redesign/reconstruct the course assessment for HSM572, especially for assessment tasks and evaluation (CAP, CI & SLT@CLO, PLO, MOHE, MQF2) based on the feedback from students and RTD with field experts.
- To develop the comprehensive manual of flow chart and template for hospital billing calculation for better understanding in teaching and learning process and public and work-related purposes.

Usefulness

- Student better understanding on hospital billing topic, attractive learning process, mastering the numerical skills, more convenience subject which are expected to reduce the psychological reactions among students.
- Instructors provide multi-teaching techniques and approaches in teaching, offer the contemporary teaching-aids that generate teaching innovation and creativity.
- Universities (IPTs) as a fundamental guideline in developing similar subject.
- Insurance companies and agents as comprehensive module/manual for clients.
- Public provide guideline in helping to understand basic hospital bill's calculation.

Commercialization Potential

- The revised CAP and CI reflects the new assessment for HSM572 that will be presented in JAF Meeting and CR 2023 (Faculty and University level).
- The revised CAP and CI serves as essential reference for other IPTs since only offered in the Bachelor's Degree of Health Administration (Hons) in UiTM Puncak Alam only.
- SMART Billing acts as primary reference to help relevant parties (instructors, students, and insurance companies) on how to calculate the hospital bills accurately.
 The comprehensive SMART Billing module/manual can be offered through possible
- consultation service to interested parties and to collaborate with them.
 SMART Billing has initially been reviewed by the health administrators in Hospital Pantai, Ampang,

Advantages

- The revised course assessment sustain the significance and pertinent of the subject that is consistent with MQF2 learning outcomes.
- HSM572 is a part of hospital administration course; therefore, it is essential for students to master the numerical skills.
- The flowchart of billing calculation and the manual template can help relevant parties (instructors, students, and insurance companies) on how to calculate the bills accurately.

Novelty

- A research-based project.
- 1st manual for hospital billing flowchart and calculation in Malaysia.
- 1st Bachelor's Degree program offered this subject (a benchmark for other IPTs).
- Comprehensive module/manual act as reference for on campus and off-campus.

Inventors

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E-Macroeconomics Educational Games (E-MEG)

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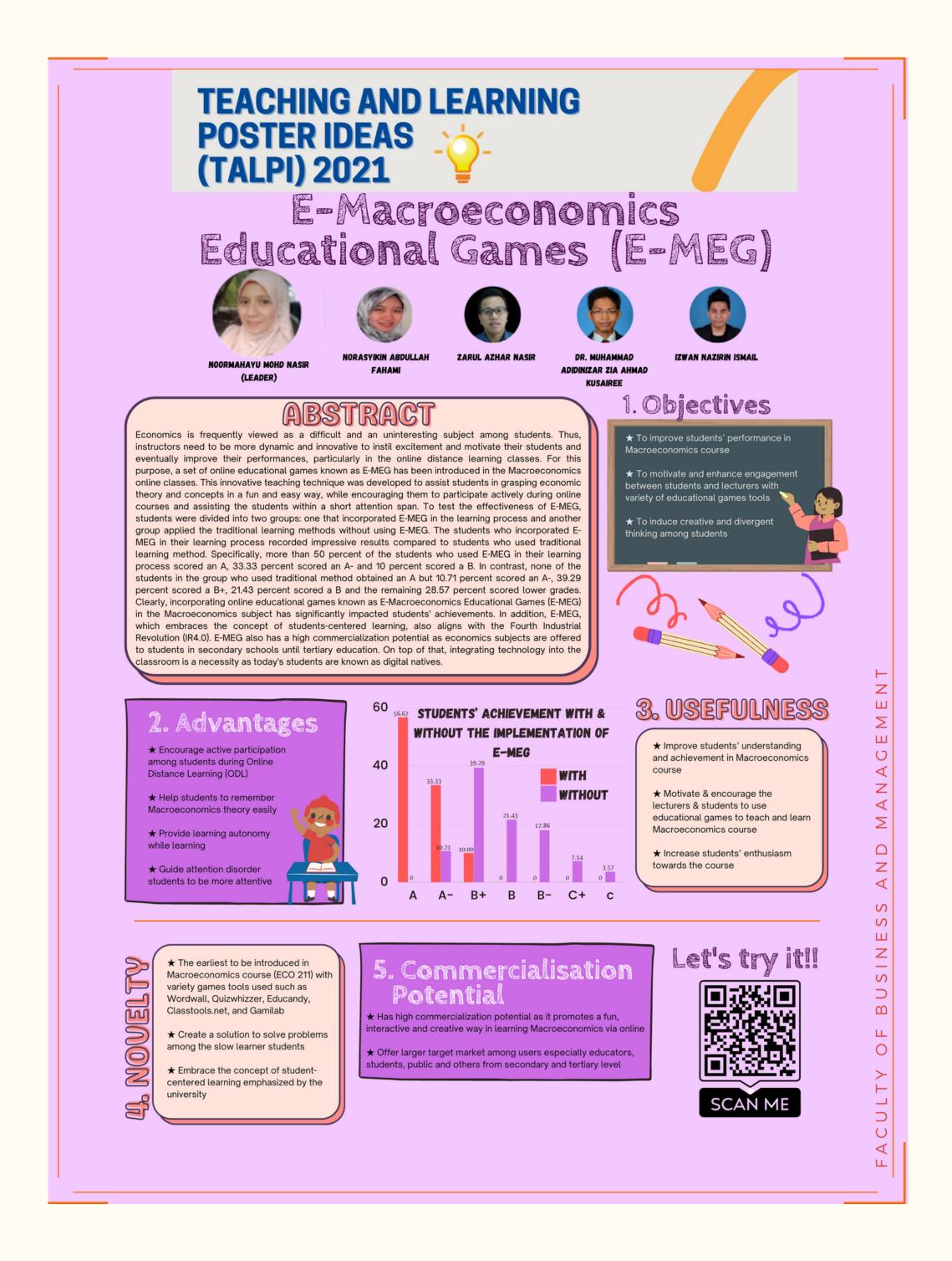
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Abstract

Economics is frequently viewed as a difficult and uninteresting subject among students. Thus, instructors need to be more dynamic and innovative to instill excitement and motivate their students and eventually improve their performances, particularly in online distance learning classes. For this purpose, a set of online educational games known as E-MEG has been introduced in the Macroeconomics online classes. This innovative teaching technique was developed to assist students in grasping economic theory and concepts in a fun and easy way while encouraging them to participate actively during online courses and assisting the students within a short attention span. To test the effectiveness of E-MEG, students were divided into two groups: one that incorporated E-MEG in the learning process and another group applied the traditional learning methods without using E-MEG. The students who incorporated E-MEG in their learning process recorded impressive results compared to students who used the traditional learning method. Specifically, more than 50 percent of the students who used E-MEG in their learning process scored an A, 33.33 percent scored an A- and 10 percent scored a B. In contrast, none of the students in the group who used the traditional method obtained an A but 10.71 percent scored an A-, 39.29 percent scored a B+, 21.43 percent scored a B and the remaining 28.57 percent scored lower grades. Clearly, incorporating online educational games known as EMacroeconomics Educational Games (E-MEG) in the Macroeconomics subject has significantly impacted students' achievements. In addition, E-MEG, which embraces the concept of student-centered learning, also aligns with the Fourth Industrial Revolution (IR4.0). E-MEG also has a high commercialization potential as economics subjects are offered to students in secondary schools until tertiary education. On top of that, integrating technology into the classroom is a necessity as today's students are known as digital natives.

Keywords: Economics, E-MEG, Macroeconomics, technology

E-Macroeconomics Educational Games (E-MEG)



Flexible Course-Level Marks Processing Tool

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Abstract

The management of course marks in the institutions of higher learning has been greatly facilitated with the advent of Teaching and Learning (T&L) technology. Integrated systems such as the UiTM's e-Result Exam System (eRES) have been used to store, analyze and generate pertinent results with a high degree of accuracy and, at a fraction of the time and effort have usually taken using the conventional method with potential inconsistency. As a result, the instructors who were normally tasked with such duty would be able to leverage on convenience rendered and pursue other academic goals of greater impacts with respect to their respective institution and career advancement. However, with the advent of Outcome-Based Education (OBE) and the specificity of the accreditation requirements, the system must be perfectly tailored to address these concerns to be of any benefit and consequently the intended entries might seem to be of higher abstraction or derivation. As such, raw marks would have to be prepreprocessed manually and separately before they can be fed into such a system. And here arguably lies the potency for inaccuracy and inconsistency in otherwise stellar implementation. This innovation has developed an Excel VBA-based program that could transform raw marks across assessments, questions, labels or performance indicators and weightage into a form more suited for the system or potential variations of it in the future so long as they can be prescribed within the labels descriptor. Furthermore, the tool could also accommodate the following flexibilities: multiple actors, multiple assessments, question discretization or a combination thereof, labels string description, respective marks or grade proximity, etc. In conclusion, the tool would complement the system in the prescribed role resulting in better computational accuracies and resolved intricacies at a fraction of the cost and time.

Keywords: Excel VBA tool, Marks processing, Academic, Computation.

Flexible Course-Level Marks Processing Tool

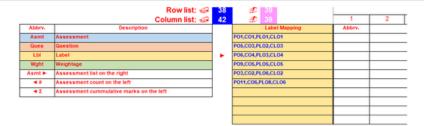
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FLEXIBLE COURSE-LEVEL MARKS PROCESSING TOOL

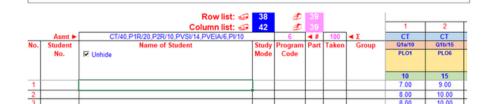
1.0 OBJECTIVES

- Develop Excel VBA-based tools to transform raw marks into values more amenable for entries into integrated academic systems such as the UiTM's e-Result Exam System (eRES).
- Enable intuitive queries for statistical information regarding course outcome attainment that might be required in academic auditing and accreditation processes.



3.0 USEFULNESS

- In the academic sector, the tool can expedite the marks processing works with minimal inconsistency and inaccuracy.
- In the auditing and accreditation process, the tool can assist in ascertaining the accuracy and reliability of the declared parameter.



2.0 ADVANTAGES

- Allow raw marks entries in the basic and fragmented forms.
- Allow transformation of raw marks into more meaningful forms.
- Allow intuitive queries for pertinent statistical information on course outcome attainment.
- Mitigate inconsistent and inaccurate computation in this regard.
- Expedite the marks processing works thus reducing time engagement.

4.0 NOVELTY

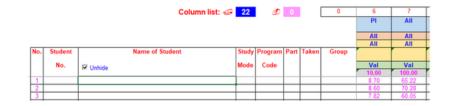
To ensure generic and flexible nature of the tool across courses and programs, the following features have been embedded:

- General string entries for assessment type, questions, academic labels, etc.
- String queries for statistical information.
- User form-guided query string formation to mitigate syntax error.
- VBA coding to reduce storage and memory consumption.



5.0 COMMERCIALISATION POTENTIAL

The potential market could include institute of higher learnings and other related services. The ubiquitous nature of the Excel platform would reduce the learning curve and the acquisition cost.



6.0 INVENTORS

- Mohamad Irwan P. Harahap
- Rohimah Khoiriyah Harahap





Business Idea Blueprint Performance Among Science and Technology Students

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Abstract

Malaysia's government and higher learning institutions are continuously focusing on entrepreneurial growth. This is aligned with Sustainable Development Goals (SDGs) to increase the number of individuals with the necessary entrepreneurship skills. One of the experiential learning activities for an entrepreneurial course in higher learning institutions is preparing a business idea blueprint. It enables students to stimulate business interest and embedded entrepreneurial skills. A business idea blueprint may use different components based on its objectives. Students registered for the technology entrepreneurship course must prepare a technology-based business idea blueprint that contributes thirty percent of the total assessment for the March 2021 intake. A total of six components were highlighted as necessary to this group project blueprint, including product description, technology description, market and strategies analysis, management team, financial estimation, and project milestones. The additional technology component in the blueprint gives an opportunity to understand the era of industrial revolution 4.0 and the ability of the new business to adapt to existing technology. This paper aims to view students' group performance based on their main blueprint contents. Students' group project performance for this semester achieved a maximum of 88 percent and a minimum of 74 percent. This performance indicates that science and technology students did their best to understand business terms and completed their group tasks during open distance learning. The business idea blueprint can also be considered one of the valuable tools in training individual competencies related to entrepreneurship. This paper recommends future studies to view the importance of innovation elements and elearning in entrepreneurship education

Keywords: Technology, business idea blueprint students

Business Idea Blueprint Performance Among Science and Technology Students

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



BUSINESS IDEA BLUEPRINT PERFORMANCE AMONG SCIENCE AND TECHNOLOGY STUDENTS

ABSTRACT

Malaysia's government and higher learning institutions are continuously focusing on entrepreneurial growth. This is aligned with Sustainable Development Goals (SDGs) to increase the number of individuals with the necessary entrepreneurship skills. One of the experiential learning activities for an entrepreneurial course in higher learning institutions is preparing a business idea blueprint. It enables students to stimulate business interest and embedded entrepreneurial skills. A business idea blueprint may use different components based on its objectives. Students registered for the technology entrepreneurship course must prepare a technology-based business idea blueprint that contributes thirty percent of the total assessment for the March 2021 intake. A total of six components were highlighted as necessary to this group project blueprint, including product description, technology description, market and strategies analysis, management team, financial estimation, and project milestones. The additional technology component in the blueprint gives an opportunity to understand the era of industrial revolution 4.0 and the ability of the new business to adapt to existing technology. This paper aims to view students' group performance based on their main blueprint contents. Students' group project performance for this semester achieved a maximum of 88 percent and a minimum of 74 percent. This performance indicates that science and technology students did their best to understand business terms and completed their group tasks during open distance learning. The business idea blueprint can also be considered one of the valuable tools in training individual competencies related to entrepreneurship. This paper recommends future studies to view the importance of innovation elements and e-learning in entrepreneurship education.



- View students' group performance based on their main blueprint contents.
- Mastering six business idea blueprint components
- · Improve minimum performance for next semester



ADVANTAGES

Experiential learning activities

Technology

Stimulate business interest and embedded



USEFULNESS

- · Technology component to understand the era of industrial revolution 4.0
- Understand the ability of new business to adapt to
- existing technology. Completed group tasks during ODL.



NOVELTY

- Understanding of six business idea blueprint components among science and technology
- Learning performance through open distance learning (ODL).



COMMERCIALIZATION POTENTIAL

- · Experiential learning process to complete six business blueprint components among science and technology students.
- Business idea blueprint module for higher learning



Management team Market & Financial









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Pecha Kucha: The Art of Delivering Presentations Through Visual Representations

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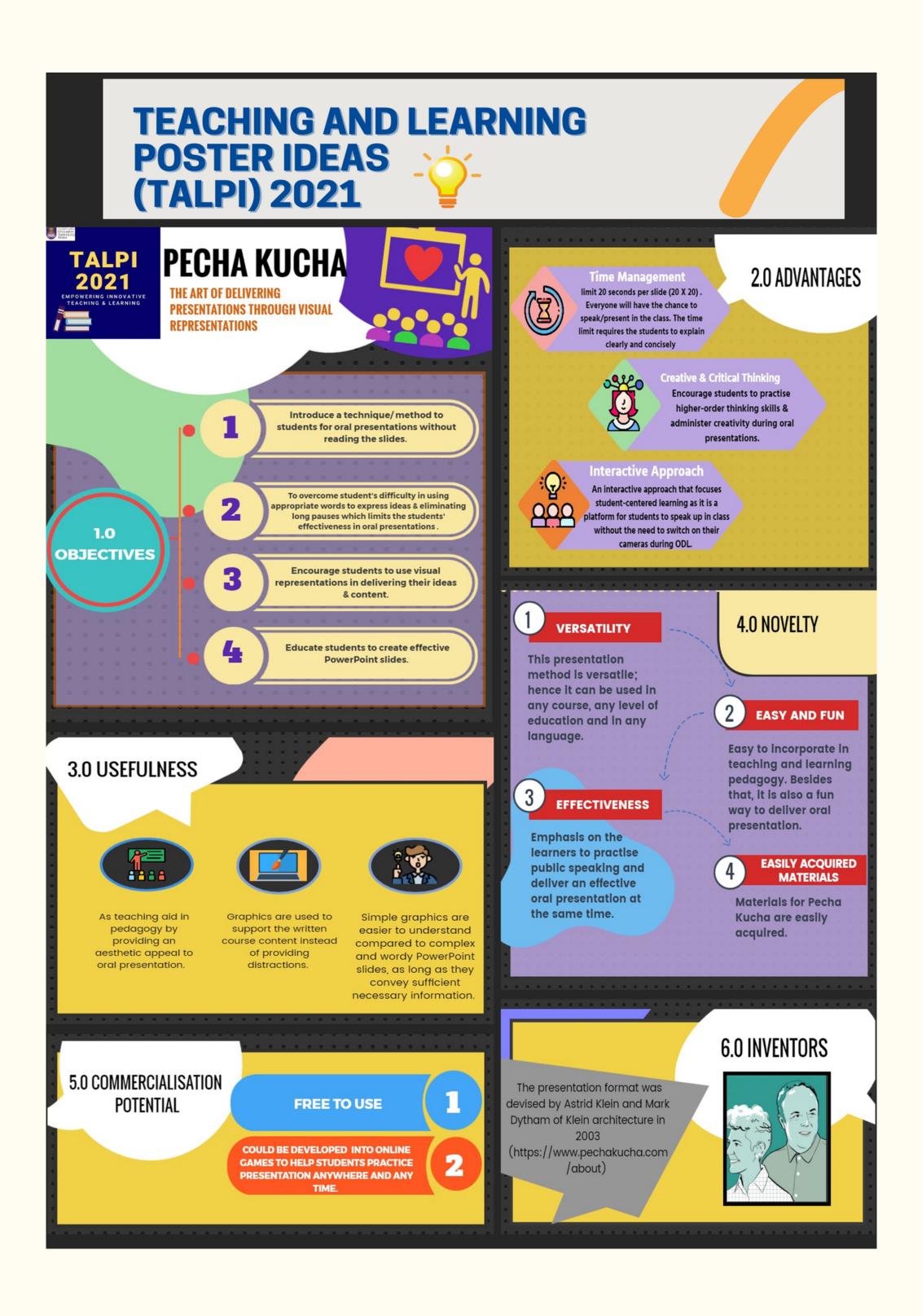
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Abstract

When it comes to PowerPoint presentations, there are two major mistakes that students tend to make. First, students are most likely to design the slides with heavily loaded words, which leads to the ineffectiveness of delivering their ideas well with clear and concise sentences. Secondly, due to their failure to design the slides effectively, students tend to read directly from the slides. These tendencies are the ingredients of non-effective presentation delivery, limiting the speaker's energy and attentiveness in delivering an oral presentation that directly affects their content. The problem becomes obvious during Open and Distance Learning (ODL). Students favor keeping their camera close during a presentation, hindering the lecturers from viewing their facial expressions. With cameras off, students will just read out aloud directly the slides or their notes. This defeats the purpose of assessing their ability to deliver a presentation and public speaking, which are both important elements in their character-building soft skills. Therefore, Pecha Kucha can be an alternative approach for providing an effective presentation without the need for the speaker to open the camera as the contents are presented via a visual aide. As long as the speaker can articulate their ideas without difficulties stringing the words and speaking accurately, Pecha Kucha is a suitable approach for presenting any materials in oral presentations. In addition, Pecha Kucha emphasizes using visual representations as the medium to share any content. When used properly, visuals and graphics can enhance context and information, enhancing the presentation's credibility. Pecha Kucha is not just a presentation technique but a key to build the students' confidence in presenting the value of their content and product.

Keywords: Pecha Kucha, visual representations, presentation technique

Pecha Kucha: The Art of Delivering Presentations Through Visual Representations



CTG 123

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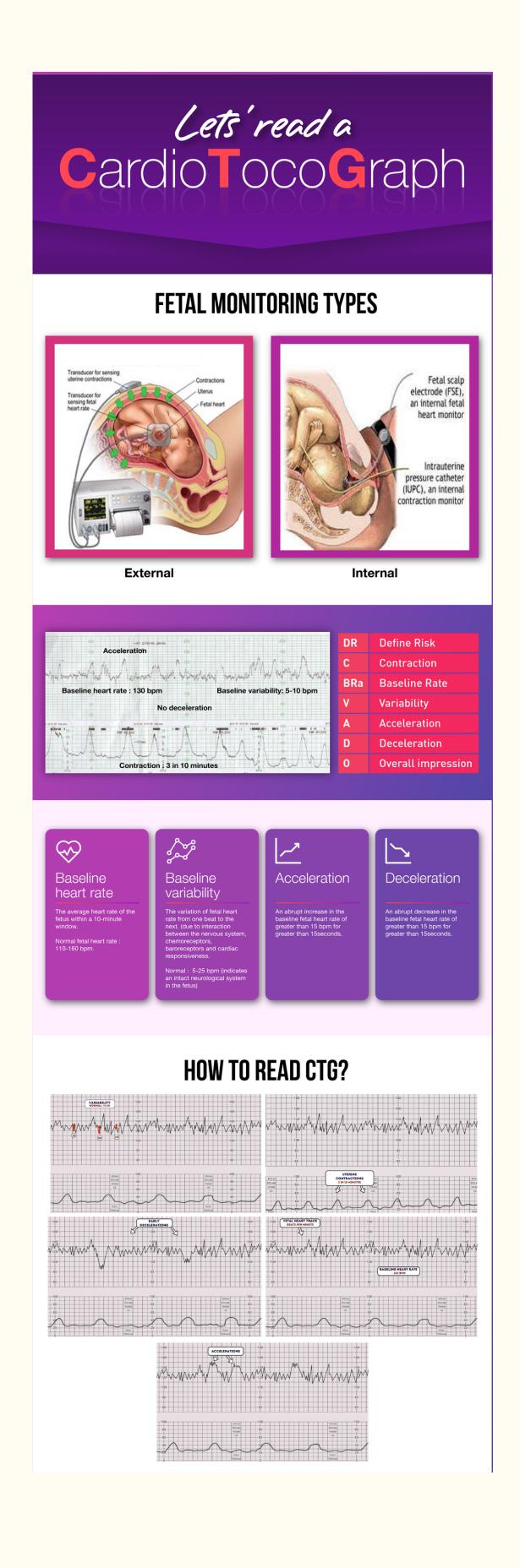
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Abstract

Cardiotocograph (CTG) is a recording of the fetal heartbeat and the uterine contractions used in pregnancy. It is most frequently used for fetal monitoring in a labouring mother. It is placed over the mother's abdomen near the fetus's heart to measure the fetal heart rate and uterine pressure. CTG uses sound waves called ultrasound to detect the baby's heart rate and tocodynamometer to measure the tension of the maternal abdominal wall as an indirect measurement of the intrauterine pressure. CTG is interpreted by a trained observer involved in the labour ward management. The criteria analyzed during CTG interpretation are baseline rate, variability, accelerations, and decelerations. As medical students, they were taught how to interpret CTG. This is a basic requirement needed before they graduate and to function as a house officer later. Learning CTG from the textbook may be difficult and not sufficient. A poster will make learning CTG more interesting and may aid better understanding. Learning through visual information is more effective especially in a busy clinical setting. The poster encompasses the important aspects of CTG and is an easy way to interpret the tracing. It is comprehensive, informative and made easy to be understood by the medical students, nurses and junior doctors. The poster can be exhibited in the labour room for easy reference in labour ward management

Keywords: Cardiotocograph (CTG), medical students, poster

CTG 123



SSDM Influencer

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Abstract

SSDM Online (Sistem Sahsiah Diri Murid) merupakan satu sistem yang diperkenalkan oleh KPM bertujuan untuk merekodkan amalan baik dan salahlaku murid. Di peringkat sekolah pengisian secara efektif masih lagi di tahap minimal. Oleh yang demikian saya telah mencipta satu aplikasi QR Code iaitu SSDM INFLUENCER di SK Padang Tembak 2 bagi meningkatkan pengisian yang lebih efektif dimana ia lebih mengutamakan amalan baik sebagai proses pembentukan sahsiah murid. Melalui SSDM INFLUENCER ini murid-murid akan digalakkan melakukan amalan baik untuk meningkatkan status sahsiah diri. Dengan pemupukan amalan baik ini, matlamat utama dapat mengawal kecenderungan murid melakukan kesalahan disiplin dari semasa ke semasa. Dalam mengklasifikasikan sahsiah murid, sistem mata (markah) diperkenalkan. Sistem ini boleh digunakan untuk membantu murid, terutama yang 'hight risc' untuk meningkatkan status sahsiah ke arah yang lebih baik. Manakala murid-murid yang 'baik' akan digalakkan untuk mencapai status sahsiah Amat Baik dan Terpuji. Di SK Padang Tembak 2, SSDM Influencer dapat menjadikan ramai murid dapat mencapai status sahsiah yang terbaik dan boleh menjadi contoh kepada murid lain. Guru juga dapat mengatasi kekangan pengisian dengan menggunakan sistem ini iaitu dengan cara mengimbas QR Code tersebut, ini dapat menggalakkan guru untuk mengisi sistem ini secara lebih efektif mengikut kesesuaian masa mereka ke dalam SSDM online. Selain itu, murid akan berlumba-lumba untuk melakukan amalan baik supaya dapat meningkatkan status sahsiah masing-masing.

Kata Kunci: Sistem Sahsiah Diri Murid, murid, kesalahan disiplin, QR Code

SSDM Influencer

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021

SSDM INFLUENCER

SSDM INFLUENCER merupakan satu sistem yang mampu mempengaruhi amalan baik seseorang pelajar. Aplikasi ini dicipta bagi memudahkan kedua-dua pihak iaitu guru dan juga murid. Ia berfungsi mempengaruhi pelajar untuk berlumba-lumba melakukan amalan baik. Ia juga memudahkan para guru untuk merekodkan amalan baik ke dalam sistem SSDM Online sedia ada bila-bila masa sahaja. Sistem ini menggunakan aplikasi QR Code iaitu guru akan mengimbas QR Code yang terdapat pada murid bagi merekodkan amalan baik mereka. Setiap amalan baik yang direkodkan mempunyai mata ganjaran yang mensasarkan 5 status sahsiah murid iaitu TERPUJI, AMAT BAIK, BAIK, PERLUKAN PERHATIAN, DAN PERLUKAN PERHATIAN SERIUS. Berdasarkan 5 status ini, pihak sekolah akan memberi anugerah tertinggi berupa sijil penghargaan dan hadiah menarik bagi murid yang berjaya mencapai status TERPUJI berdasarkan kutipan mata tertinggi.

OBJEKTIF

- Melahirkan murid yang mempunyai sahsiah yang baik.
- Mewujudkan suasana sekolah yang sentiasa mengamalkan amalan baik dan menerapkan nilai murni di dalam kehidupan seharian.
- Meningkatkan motivasi murid untuk menjadi insan yang lebih cemerlang melalui pembudayaan amalan baik.
- mengelakkan penghukuman serta menyemai amalan yang baik, sikap berkasih sayang antara guru dan murid dalam suasana yang harmoni dan damai
- Membantu pihak sekolah dalam memantapkan pengurusan disiplin selaras dengan perkembangan dunia teknologi maklumat dan komunikasi dan mengoptimumkan aplikasi sedia ada.

ADVANTAGES (KELEBIHAN)

- Meningkatkan amalan baik dan nilai murni dalam kalangan murid.
- Murid sentiasa berlumba-lumba untuk melakukan amalan baik dan meninggalkan amalan tidak baik bagi memastikan mendapat mata yang tinggi di dalam SSDM.
- Motivasi yang tinggi dalam kalangan murid.
- Murid akan lebih berhati-hati untuk tidak melakukan kesalahan.
- Mewujudkan suasana pembelajaran yang lebih tenang dan harmoni.
- Perekodan dalam SSDM dapat meningkatkan motivasi murid untuk menjadi insan yang lebih cemerlang dan sebagai contoh kepada murid lain

USEFULNESS (KEGUNAAN)

- Membantu murid mengumpul mata amalan baik dan seterusnya dapat meningkatkan sahsiah diri.
- Penggunaan modifikasi tingkah laku adalah untuk mengubah tingkah laku negatif kepada positif
- Pengaruh yang dibawa oleh sistem ini mampu mengubah tingkah laku murid supaya sentiasa berhati-hati untuk melakukan sesuatu perkara yang tidak baik.
- Memudahkan kerja guru iaitu dengan terus mengimbas QR Code untuk senarai murid yang melakukan amalan baik, dan memilih masa yang sesuai untuk mengisi ke dalam sitem SSDM.

NOVELTY (KEUNIKAN)

- Sistem ini mempunyai keunikannya yang tersendiri kerana memudahkan kedua-dua belah pihak iaitu guru dan murid, murid akan sentiasa membawa QR Code mereka sepanjang berada di Sekolah, Guru akan terus mengimbas kod tersebut apabila murid melakukan amalan baik.
- Sistem ini mengutamakan amalan baik sebagai proses pembentukan sahsiah diri, dan mengelakkan penghukuman terhadap murid.

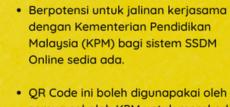
CONTOH QR CODE MURID



INVENTORS

ROSNIZAR BINTI RAHIM & NORAZIZA BINTI ABD. HAMID

CODE MURID POTENSI UNTUK DIKOMERSIALKAN



- semua sekolah KPM untuk merekod amalan baik murid.
- Sistem ini berpotensi membudayakan nilai-nilai murni di sekolah.





DARI SEKOLAH KEBANGSAAN PADANG TEMBAK 2, KUALA LUMPUR.

e-MCK

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Abstract

Sebagai sebuah institut yang mengangkat Pendidikan Inklusif (khas), IPG Kampus Ilmu Khas (IPGKIK) mengupayakan khidmat masyarakat kepada Murid-Murid Bekeperluan Khas (MBK) khususnya dari segi peningkatan psikomotor dan pengembangan potensi murid-murid MBK. Dalam kajian tinjauan yang dilakukan, kebanyakan MBK tidak mempunyai akses latihan untuk mengembangkan potensi Psikomotor dan tidak mempunyai kaedah serta teknik yang bersesuaian. Berdasarkan sedar demi kemasyarakatan IPGKIK telah memperkenalkan Modul Celik Kraf (e-MCK) di mana pengupayaan fungsi pengembangan psikomotor dapat dilaksanakan melalui beberapa jenis kraf yang direka bagi membantu MBK. Kit mudah telah dihasilkan bagi membimbing para guru mengajar dan seterusnya murid dapat mengendalikan aktiviti rangsangan terhadap psikomotr. Oleh kerana pandemik melanda dunia maka inovasi ini dilaksanakan secara hibrid dalam talian. Disebabkan pandemik berpanjangan pula, maka inovasi dipertingkatkan lagi dengan penghasilan flipbook sebagai panduan rujukan. Impak implikasi inovasi sudah tentunya MBK mempunyai akses untuk melaksanakan aktiviti dengan menggunakan kit yang disediakan dan juga flipbook sebagai rujukan. Di samping itu apa yang lebih membanggakan, pasukan inovasi telah dijemput oleh Pusat Komuiti PPDK Seri Gombak untuk bersama-sama memberi bimbingan dan tunjuk ajar secara kolektif berdasarkan inovasi e-MCK ini.Hasil daripada bimbingan yang diberikan PPDK Seri Gombak telah berjaya menghasil dan menjual produk daripada kit tersebut. Oleh kerana program ini pernah dipaparkan secara webinar dalam talian dalam e-CPD IPGKIK, maka program ini juga telah ditonton oleh ramai para MBK, murid aliran perdana dan pendidik di sekolah-sekolah seluruh Malaysia. Mereka juga telah mengimplementasikan inovasi ini untuk diguna pakai di sekolah seluruh Malaysia. Inovasi ini telah dipatenkan dan telah dijual produknya melalui kit mega dan juga kit kompak yang boleh dimiliki oleh sesiapa pun dengan harga yang berpatutan. Penghasilan artikel jurnal juga telah dibuat bagi melihat kebolehupayaan dan kegunaan inovasi ini kepada masyarakat khususnya MBK.

Kata Kunci: Modul Celik Kraf (e-MCK), Murid-Murid Bekeperluan Khas, (MBK), psikomotor

e-MCK



Ez-ICN: Intensive Care Nursing Made Easy "One-Stop Centre, Let's Explore Together

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Abstract

Successful teaching and learning process not only depends on lecturers' and students' ability to teach and to learn. Medium for knowledge source has to become a major concern especially during Movement Control Order (MCO) due to the Covid-19 pandemic since last year. One of the positive impacts of this disaster is the significant advancement in the usage of the online Learning Management System (LMS) among lecturers. Based on a student-directed learning approach, the Ez-ICN is specially created for undergraduate nursing students in UiTM Puncak Alam Campus to help them learn about Intensive Care Nursing (ICN) through online-based education. The Ez-ICN is a One-Stop Center (OSC) source of information regarding ICN created using free padlet software that functions as a digital canvas. With the tagline of "One Stop Centre, Let's Explore Together", nursing students were invited to collaborate in the development of this OSC based on the course syllabus of ICN (NRS541) to create a "self-belonging" to that padlet. The contents' accuracy is being monitored by the lecturer in charge of this syllabus code. This project aimed to develop a "student-friendly" Learning Management System for Intensive Care Nursing subject. The uniqueness of this product is the "OSC concept" as a limited online website or blog similar to the Ez-ICN found on the internet. All features are gathered in OSC including fact information for each sub-topic, Useful Resources, Related Video, Self-Exercises, "Pop Quiz Q", "Game Time!" and Student's Feedbacks. The Ez-ICN is very easy to be accessed, just need to click the shared link or QR code, which leads to quick access to this product without sign-in requirement. Can be shared - copy link, QR code, Embed in blogs or your website, email, FB, Twitter, GCR

Keywords: intensive nursing care, learning management system, one stop centre, nursing student

Ez-ICN: Intensive Care Nursing Made Easy "One-Stop Centre, Let's Explore Together



TITLE

Ez-ICN: Intensive Care Nursing Made Easy "One-Stop Centre, Let's Explore Together"

Link: https://padlet.com/suzanay/21ti4gr9rn4lgw6w IPR: 600-BITCOM (IP. 5/2/6/3/CP)

ABSTRACT

One of the positive impacts of the COVID-19 and MCO is the significant advancement in the usage of the online Learning Management System (LMS) among lecturers. To support student-directed learning, the Ez-ICN is specially created for undergraduate nursing students in UiTM Puncak Alam Campus to help them learn about Intensive Care Nursing (ICN) through online-based education.

1.0 Objectives

- 1. To develop a "student-friendly" Learning Management System for the
- ICN subject. 2. To provide students with a simple, interesting, and interactive method of learning the ICN subject. 3. To introduce the Ez-ICN to the

3.0 USEFULNESS

public.

- 1. As quick reference for students:
- pre reading before attending classes and revision after class.
- revision especially during study week.
- access to useful resources such as e-book, protocols, podcast & videos.
 - assess their own understanding (join quizzes and games).
- 2. As teaching tool/aid and LMS for nursing lecturer
 - ❖ To assist in T&L session.

5.0 COMMERCIALISATION POTENTIAL

- 1. Contents of the Ez-ICN can be transformed into an interactive e-book that can be marketed to other nursing colleges.
- 2. Published in OER Commons on 23rd June 2021 Link: https://www.oercommons.org/courseware/lesson/82557

1. Easy to be accessed: No login/sign in required

2.0 ADVANTAGES

- (no need to create an account to join in).
- 2. Easy to be shared: copy link, QR code, embedded in the website, email, FB, Twitter, IG, GCR.
- 3. Contents can be exported in various types of files (e.g image, PDF, CSV & excel spreadsheet).
 - 4. Can be used online or offline.

4.0. Novelty

The "OSC concept"

All features are gathered in OSC (Fact Information for each sub-topic,

Useful Resources, Related Video,

Self-Exercises, "Pop Quiz Q", "Game Time!" and Student's Feedbacks).

6.0 INVENTORS





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Bite-Sized Lesson on TikTok: The Fundamentals of Instructional Human Training and Management

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Abstract

Social media platforms such as TikTok is becoming increasingly popular among educators to enhance their teaching, and their students' learning. TikTok is a social media application owned by a Chinese company known as ByteDance. The application allows users to create content ranging from 15 seconds to three minutes long. It also allows users to interact with each other by duet, lip-sync, and content stitch. TikTok offers a large variety of filters, sounds and users can also control access to their contents. For the purpose of teaching and learning, one TikTok page was created as a platform to educate students on Instructional Human Training and Management. The objectives of this page are: 1) To increase students' motivation to learn and participate in the course, 2) To engage with the public and Instructional Designers on TikTok, and 3) To educate viewers and followers about the roles of Instructional Designers. The TikTok page created by the course instructor contains short videos on basic knowledge about the course ranging from 15 to 60 seconds. Students are encouraged to engage with the content either through the comment section or by their own TikTok video. This indirectly allows students to learn about Instructional Design during the process of content creation. A 15 to 60 seconds video forces the creator to only focus on the key idea to create bite-sized lessons. Beyond these bite-sized lessons, the intention to use TikTok as a teaching and learning tool is to educate more than just the students, but also the public and industry players about the importance of the course. The recognition of Instructional Design and effective training development in Malaysia is not as widely known as other industries, therefore with the creation of this TikTok page attempts to help get the message across the public and industry players.

Keywords: TikTok , Instructional Human Training and Management, video

Bite-Sized Lesson on TikTok: The Fundamentals of Instructional Human Training and Management



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Using Padlet for a Flipped Classroom Approach in Learning Physiology of Musculoskeletal System

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Abstract

The musculoskeletal system is one of the modules covered in the first year of the undergraduate medical program. As first-year students who are new to the educational system, there are many challenges faced including adaptation to the new norm of learning i.e., online distance learning (ODL). Therefore, the knowledge transfer process should be arranged in a simple and well-organized manner to ease their learning experience. Padlet is one of the e-learning tools that is widely used for ODL. It is a user-friendly digital canvas, which compiles all information in a single wall and is accessible at any time convenient to the learners. A series of Padlets on Physiology of Musculoskeletal System was prepared as an e-learning tool to share resources and learning materials in preparation for a flipped classroom session. This series of Padlets comprehensively covers the basic and essential points of the lecture topics i.e., Neuromuscular junction, Skeletal muscle contraction and Properties of skeletal muscle contraction. The uploaded materials include their own lecture notes, engaging videos, and interesting articles on respective topics. To facilitate learning and for better understanding, the information is presented in a straightforward, easy-to-digest, and concise manner with the audio-visual interface. The flipped classroom is a form of blended learning and it aims to promote students' active engagement in learning. To prepare for the session, the links for Padlets were made accessible to the students via their own channel in Microsoft Teams. Students are free to download and study the materials at any time convenient to them. In addition, a set of quizzes was given to the students as a reflection of their understanding on the materials posted in the Padlet walls. The channel in Microsoft Teams provides a platform for student-teacher interaction for queries and discussion on the lecture topics

Keywords: Musculoskeletal system, Padlet, Flipped classroom

Using Padlet for a Flipped Classroom Approach in Learning **Physiology of Musculoskeletal System**





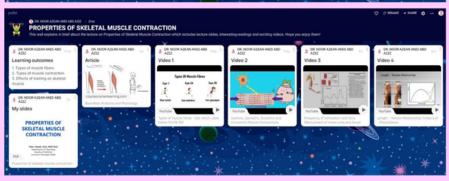
USING PADLET FOR A FLIPPED CLASSROOM APPROACH IN LEARNING PHYSIOLOGY OF MUSCULOSKELETAL SYSTEM

PRODUCT INFORMATION

Padlet is widely used for online distance learning. It is a userfriendly digital canvas, which compiles all information in a single wall and is accessible at any time convenient to the learners. A series of Padlets on Physiology of Musculoskeletal System was prepared which comprehensively covers the basic and essential points of the lecture topics i.e., Neuromuscular junction, Skeletal muscle contraction and Properties of skeletal muscle contraction. The uploaded materials include lecturer's notes, engaging videos, and interesting reading articles on respective topics.

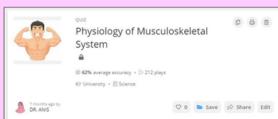






Flipped classroom is a form of blended learning which aims to promote student's active engagement in learning. To prepare for the session, the links for Padlets were made accessible to the students via the lecturer's own channel in Microsoft Teams. The channel provides a platform for student-teacher interaction for queries and discussion on the lecture topics. In addition, a set of structured guiz questions was also given to the students as a reflection of their understanding on the materials posted in the Padlets.





OBJECTIVE

The series of Padlets aims to provide an e-learning platform to share resources and learning materials on Physiology of Musculoskeletal System.

USEFULNESS

The series of Padlets facilitate learning for better understanding of the lecture topics in preparation for a flipped classroom session. Flipped classroom approach was implemented to promote student's active engagement in learning.

ADVANTAGES

Padlet

- ✓ User-friendly
- √ Easily accessible no account is needed
- ✓ Information is gathered at one place save time
- ✓ Convenient accessible at anytime and anywhere ✓ Audio-visual interface – attractive digital learning

Flipped classroom

- ✓ Encourage active and independent learning
- ✓ Enhance self-motivation

NOVELTY

Information in the Padlet wall is presented in a straightforward, easy-to-digest, and concise manner with audio-visual interface to enhance learning experience, engagement and self-motivation.

COMMERCIALIZATION POTENTIAL

- ✓ Compilation of information in a single wall for each topic
- ✓ Information is concise, straightforward and easy-to-digest
- ✓ Attractive interface with audio-visual components
- ✓ Positive students' feedback on Padlet as an e-learning tool and implementation of flipped classroom in enhancing active learning





Utilising Image-Based Learning Via Instagram to Improve the Comprehension of the Communication Policy and Strategy Course

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Abstract

The COVID-19 pandemic has forced educators across the world to utilize teaching tools that could engage students in their online learning. Many educators have opted to embed social media in their teaching. One of the platforms is Instagram. Instagram is a popular social media platform that enables its users to upload pictures and videos with short captions and share them publicly or privately. Also, Instagram allows its users to interact with their followers or the general public in the comment or direct message section. For the purpose of enhancing student learning and creating student engagement for the Communication Policy and Strategy course, three (3) Instagram accounts were developed that explores policies related to child protection and welfare, smoking, and plastic pollution. Students were encouraged to find relevant content for the accounts and engage with policy makers, NGOs and the general public on the selected issues. Images posted on Instagram allows students to communicate difficult concepts and reduce information overload. Furthermore, the platform's 2,200 characters caption limit provides sufficient space for students to describe the contents posted. At the end of the course, image-based learning is expected to enhance students' participation by allowing them to be more actively involved in the learning process and also, providing students the opportunity to interact with the public who shares the same interest on the issue discussed. At a time where students are expected to rely on online learning, using tools that is used and preferred by millions of people every day especially young adults, is essential

Keywords: Communication Policy and Strategy course, Instagram accounts, images

Utilising Image-Based Learning Via Instagram to Improve the Comprehension of the Communication Policy and Strategy Course



UTILISING IMAGE-BASED LEARNING VIA INSTAGRAM TO IMPROVE THE COMPREHENSION OF THE COMMUNICATION POLICY AND STRATEGY COURSE

Introduction

The COVID-19 pandemic has forced educators across the world to utilise teaching tools that could engage students in their online learning. Many educators have opted to embed social media in their teaching. One of the platforms is Instagram. **Instagram** is a popular social media platform that enables its users to upload pictures and videos with short captions and share them publicly or privately. Also, Instagram allows its users to interact with their followers or the general public in the comment or direct message section.

Advantages

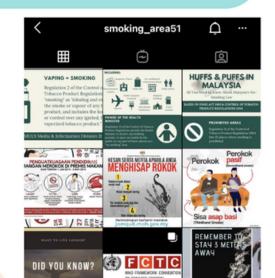
Learning through image-based learning can allow students to be more actively involved in the learning process and also, provide students the opportunity to interact with the public who shared the same interest on the issue discussed.

Objectives

Three (3) Instagram accounts were developed for the purpose of:

- To explore policies related to child protection and welfare, smoking, and plastic pollution.
- To enhance student learning and create student engagement for the Communication Policy and Strategy course.
- To educate students on policies through image-based learning.





Usefulness

Students are able to utilise the Instagram accounts developed to engage with policy makers, NGOs and the general public. Images posted on Instagram allows students to communicate difficult concepts and reduce information overload.



Furthermore, the platform's 2,200 characters caption limit provides sufficient space for students to describe the contents posted.

Novelty

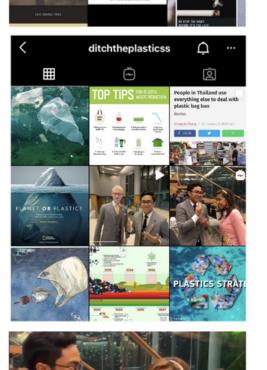
Students can "engage" and "communicate" difficult concepts in a simplified way to other students and the general public via the Instagram accounts created.

Potential Commercialisation

This type of teaching and learning using images and short captions can be applied to other courses and disciplines at other universities as well.

Inventors

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iQ-Lesson: Pedagogi Interaktif

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Abstrak

Perancangan aktiviti dalam proses pengajaran dan pembelajaran merupakan satu elemen yang penting dalam dunia pendidikan untuk menghasilkan pembelajaran yang bermakna kepada pelajar. Pelbagai masalah pengajaran dan pembelajaran atas talian timbul disebabkan pensyarah kurang mahir menggunakan aplikasi teknologi pendidikan dengan baik. Oleh itu, pensyarah perlu mempunyai perancangan yang terbaik untuk melaksanakan PDPDT. Bagi mencapai hasrat tersebut, inovasi ini dibangunkan sebagai bahan bantu dalam proses pengajaran dan pembelajaran dalam talian (PDPDT) dengan menggabungkan beberapa aplikasi seperti Quizizz Lesson, Ms Team, Padlet, Telegram, dan YouTube dalam satu aplikasi Quizizz bagi membentuk sebuah bahan bantu yang interaktif semasa proses PDPDT bagi kursus Pengajian Islam di Politeknik. Idea inovasi ini terhasil dari masalah yang dihadapi oleh pengkaji iaitu pelajar kurang memberi tumpuan dan tidak fokus semasa proses PDPDT, malah dalam kalangan pensyarah juga mempunyai kekangan kemahiran teknologi bagi melaksanakan proses PDPDT dengan berkesan. Hasil inovasi ini sangat signifikan dengan situasi pandemik sekarang yang memerlukan pembelajaran secara dalam talian bagi mewujudkan suasana pembelajaran yang aktif dan bermakna. Inovasi ini membolehkan satu proses pengajaran dilakukan secara interaktif kerana slaid, aktiviti dan pengukuhan yang digabung jalin menggunakan aplikasi dalam talian yang sesuai, malah ia turut memberi motivasi yang tinggi kepada pelajar untuk menghabiskan pembelajaran mereka. Berpandukan dapatan kajian kebolehgunaan yang dilakukan terhadap pelajar selepas sesi PDPDT menunjukkan konstruk (reka bentuk, kobolehfungsian, kebolehbelajaran, kepuasan dan penggunaan masa hadapan) dalam soal selidik nilai min berada pada tahap yang tinggi melebihi 4.0. Ini menunjukkan bahawa ciri-ciri yang diterapkan inovasi ini menepati keperluan semasa. Daripada hasil kajian tersebut menunjukkan inovasi ini amat sesuai dengan situasi sekarang dan juga berpotensi digunakan pada masa akan datang kerana ia juga boleh diguna dalam kuliah bersemuka, selain itu inovasi ini juga dapat dikongsi dengan rakan pensyarah yang lain.

Kata Kunci: iQ-Lesson, pembelajaran dalam talian (PDPDT), pedagogi Interaktif

iQ-Lesson: Pedagogi Interaktif



CODING LINGO 2.0: The Programming Terms Board Game

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Abstract

Coding Lingo 2.0 is an educational game that teaches knowledge on programming terminology with a board game concept. It is to help introductory programming students to understand and master programming terms in a fun way. Knowledge of the programming terminology is essential for any introductory programming student to make sense of the programming itself. Educators can use Coding Lingo 2.0 to innovate teaching and learning methods for programming terms by incorporating game-based learning. It can transform the programming subjects from dry and complex to a challenging yet enjoyable experience. This game is also a platform for students to collaborate and interact in teams, and students are able to get a break from screen time. It can encourage students to learn and use official programming terms anywhere and anytime, which will enable them to communicate correctly and effectively with other programmers. Thus, this educational board game will be beneficial in helping to improve and deepening the students' fundamental knowledge of programming languages.

Keywords: Coding Lingo 2.0 , game-based learning, educational board game

CODING LINGO 2.0: The Programming Terms Board Game



TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



SUB-THEME: NON-TECHNOLOGICAL TEACHING AND LEARNING METHODS

CODING LINGO 2.0 THE PROGRAMMING TERMS BOARD GAME





01 ABSTRACT

Coding Lingo 2.0 is an educational game that teaches knowledge on programming terminology with a board game concept. It is to help introductory programming students to understand and master programming terms in a fun way. Knowledge of the programming terminology is essential for any introductory programming student to make sense of the programming itself. Educators can use Coding Lingo 2.0 to innovate teaching and learning methods for programming terms by incorporating game-based learning. It can transform the programming subjects from dry and complex to a challenging yet enjoyable experience. This game is also a platform for students to collaborate and interact in teams, and students are able to get a break from screen time. It can encourage students to learn and use official programming terms anywhere and anytime, which will enable them to communicate correctly and effectively with other programmers. Thus, this educational board game will be beneficial in helping to improve and deepening the students' fundamental knowledge of programming languages.

02 INTRODUCTION

- Learning computer programming languages involves learning the **terminology**, concepts, syntax rules, and semantic rules.
- ➤ It is important for introductory programming students to understand and feel comfortable with coding jargon before going full-fledged into practice mode.
- ➤ However, students have difficulties in learning, understanding, and memorizing the programming terms and their definitions by relying only on books and online notes. Students are easily demotivated with lots of readings.
- ➤ Without knowledge of the basic programming terms, students also would have difficulties answering theory-based exam questions related to definitions and concepts.

Ultimately, Coding Lingo 2.0 is the educational board game that introductory programming students need, to learn about programming terms and their definitions.

02

Playing this board

game enables the

students to get a

break from screen

03 OBJECTIVES

To introduce a game-based learning tool for learning programming terms and their definitions.

To increase the motivation and excitement of students in learning by playing.

To improve and deepen the students' fundamental knowledge of the programming languages.

04 ADVANTAGES

- → Coding Lingo 2.0 is an improved version that integrates the concept of a portable and small board game.
- → It is developed to help students master programming terms in an engaging, fun, and simple way.
- → It can be used to innovate teaching and learning methods for programming subjects, both in and outside classrooms.
- This game helps students to learn new programming terms and practice recalling previously known terms and definitions.

05 USEFULNESS

01

The integration of Coding Lingo 2.0 in students' centered learning activities will encourage students to collaborate, communicate and work in teams. 03

This board game also
helps to provide positive
reinforcement of
understanding and
memorization of
programming terms that
students do not always

enjoy.

04

It can encourage students to learn and use official programming terms, which will enable them to communicate correctly and effectively with other programmers. It also helps students to understand their domain better and faster.

06 NOVELTY

The available games for programming subjects focus on learning the coding structures and code excerpt only.

Meanwhile, existing methods for learning computer programming terms are only available via online websites, flashcards, and books.

This inspired the development of Coding Lingo 2.0, as an educational board game for learning, understanding and memorizing computer programming terms and definitions, is something new!



07 COMMERCIALISATION POTENTIAL

Coding Lingo 2.0 has the potential as an educational STEM game to promote interest in technology and programming among students in schools.

Any Computer Science and computer programming educators can easily adopt the board game for schools and higher learning institutions.

As a self-learning tool to enable students to share the fun learning experience with their friends.

08 INVENTORS

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Biochemistry and Molecular Medicine Practical Teaching for Preclinical Medical Students During COVID-19 Pandemic

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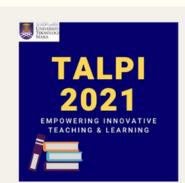
Abstract

Higher Education Institutions are becoming more receptive to integrating new technologies into their teaching and learning courses amid the COVID-19 pandemic. In the 2020/2021 academic year, activities on laboratory experiments for preclinical medical students at the Universiti Teknologi MARA have been taught through online methods. The laboratory practical teaching process becomes quite challenging where the students can only grasp the theoretical part without having enough practical skills. Instead of using a 'dry' teaching approach such as pre-recorded videos, we developed a Massive Open Online Course (MOOC) according to our current curriculum to provide effective learning experiences by including various activities such as a variety of learning aids, quizzes, problem sets, and other engagements such as online forums for discussion purposes. This is the first Biochemistry and Molecular Medicine MOOC practical that has been created under Bachelor of Medicine-Bachelor of Surgery (MBBS) program. It provides all materials for Biochemistry and Molecular Medicine practical under one official platform with self-assessment activities to assess the understanding of the online content. Recent evidence has shown that e-learning approaches can increase students' engagement, besides offering unlimited access to students across the country at their convenience. By utilizing this MOOC, the lecturers are also able to gain insights into the students' level of understanding, learning needs for further explanation, and are able to monitor the students' progress.

Keywords:undergraduate online laboratory experiments, Biochemistry and Molecular Medicine, practical teaching, preclinical medical students, COVID-19

Biochemistry and Molecular Medicine Practical Teaching for Preclinical Medical Students During COVID-19 Pandemic

POSTER ID: TALPI96B



TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021

BIOCHEMISTRY AND MOLECULAR MEDICINE PRACTICAL TEACHING FOR PRECLINICAL MEDICAL STUDENTS DURING **COVID-19 PANDEMIC**





Introduction

Higher Education Institutions are becoming more receptive to integrating new technologies into their teaching and learning courses amid the COVID-19 pandemic. In the 2020/2021 academic year, activities on laboratory experiments for preclinical medical students at the Universiti Teknologi MARA have been taught through online methods. The laboratory practical teaching process becomes quite challenging where the students can only grasp the theoretical part without having enough practical skills.

OBJECTIVE

BMM

- To enhance remote teaching and apply different approaches to achieving laboratory delivery to improve learning experience.
- To enhance students understanding on laboratory tests for multiple clinical purposes such as screening, risk assessment, establishment of a diagnosis, support of a diagnosis and exclusion of a diagnosis, prognosis by including online assessment methods.

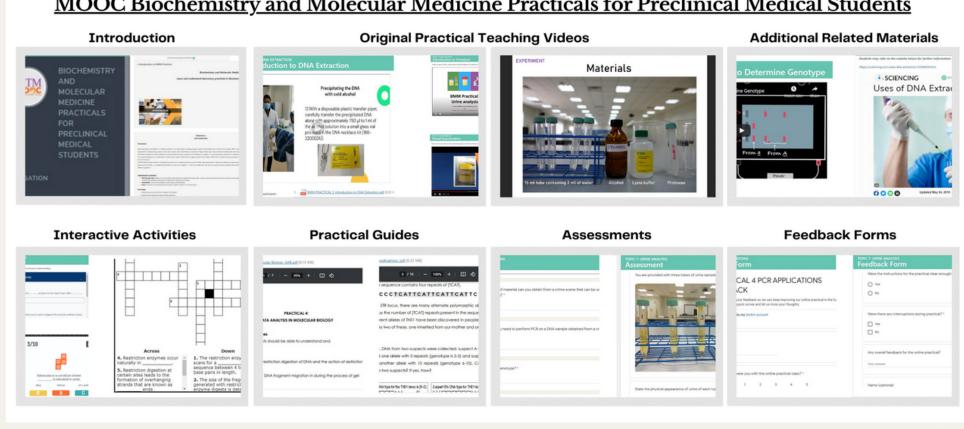
ADVANTAGES

Instead of using a 'dry' teaching approach our current curriculum to provide effective learning experiences by including various engagements such as online forums for to monitor the students' progress. discussion purposes.

USEFULNESS

All materials for Biochemistry and Molecular such as videos, we developed a Massive | Medicine practical are provided under one official Open Online Course (MOOC) according to platform with self-assessment activities to assess the understanding of the online content. By utilizing this MOOC practical package, the lecturers can gain activities such as a variety of learning aids, insights into the students' level of understanding, quizzes, problem sets, and other learning needs for further explanation, and are able

MOOC Biochemistry and Molecular Medicine Practicals for Preclinical Medical Students



Novelty

This is the first Biochemistry and Molecular Medicine MOOC practical that has been created under Bachelor of Medicine-Bachelor of Surgery (MBBS) program. It is developed according to the current curriculum to provide effective learning experiences by including various activities such as quizzes, problem sets, and various engagements via peer and self-assessment, as well as online forums for discussion purposes.

Commercialisation Potential

Copyright of the online practical package.





Life of Khalifah (LOK): An Online Islamic Multiplayer Strategy Card Game

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Abstract

In today's modern world, the decline of morality among our teenagers is a major concern. Many factors contribute to this issue, including social media, peer pressure and poor family involvement. If left unattended, moral deterioration will become more serious and out of control, ultimately leading to negative behaviours including bullying, drug abuse, gambling and suicide. Therefore, there is an urgent need for intervention to assist in development of good moral values and positive virtues. Life of Khalifah (LOK) is an online Islamic multiplayer strategy card game that was designed to increase awareness in terms of value system, emotional management and decision-making among players. Considering the fact that there are 20.1 million gamers in Malaysia alone in the year 2019 (Elliott, 2020), LOK is harnessing the influence of online gaming to boost individual's character and psychological well-being. The gamification approach, added with reward and community building system will definitely be interesting to players, as they help each other in their journey of completing the game quest. LOK is unique as it captures the essence of Islamic values in online multiplayer card game, which includes integration of knowledge and spiritual values. Its application is not only limited for leisure activity, but had also been used in classroom setting as teaching aids. Field tests had been done in various environments (home, school, motivational camp) which result in numerous positive reviews from players. LOK strives to improve the very core of player's character and strengthen the foundation of their moral beliefs. Finally, this innovation hopes to empower teenagers as future leaders in making better life decisions which will lead to better personality, community and life.

Keywords:Life of Khalifah (LOK), card game, online

Life of Khalifah (LOK): An Online Islamic Multiplayer Strategy Card Game

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021

LIFE OF KHALIFAH (LOK): AN ONLINE ISLAMIC MULTIPLAYER STRATEGY CARD GAME

ABSTRACT

In today's modern world, the decline of morality among our teenagers is a major concern, which leads to negative behaviours like bullying, drug abuse, gambling & suicide. **Life of Khalifah (LOK)** is an online Islamic multiplayer strategy card game designed to increase awareness in terms of value system, emotional management and decision-making among players. The gamification approach is well suited in various environments (home, school, motivational camp), added with reward and community building system that are interesting for players.



1.0 OBJECTIVES

- To strengthen **Islamic moral values** and **positive virtues** in a fun and interactive environment.
- Empower youth in making better life decisions which will lead to better personality, community and life.

.0 ADVANTAGES

- User-friendly and interactive platform for all ages.
- **Integrated learning** of Islamic virtues into real life situation.
- Promotes active teaching and learning approach.
- Enhances Higher Order Thinking Skills (**HOTS**).

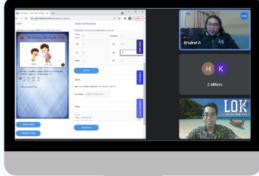
3.0 USEFULNESS

- Great for building social interaction and negotiation skills.
- As teaching aids to improve learning of Pendidikan Islam and Pendidikan Moral subject.
- Ideal as a family game to strengthen bonds.

5.0 COMMERCIA-LISATION POTENTIAL

- Ready to use and fully functioning system.
- Field tested in various environments.
- Invention patented with Perbadanan Harta Intelek Malaysia (MyIPO).

4.0 NOVELTY



- **Compatible** with various devices including laptops, tablets & smart phones.
- Automated score tracking system.
- Players will be part of positive LOK community.
- Expandable card collection (booster pack, new edition & limited edition cards).

6.0 INVENTORS



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ARCHEMEX- Mobile Augmented Reality Application for Conducting Chemistry Experiment

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Abstract

ARChemEx allows students to perform chemistry experiments on smartphones using augmented reality technology. Chemistry experiments are one of the main activities at school to help students understand relevant chemistry topics through experiment practice. However, chemistry experiments are costly, time-consuming and dangerous. In addition, students do not have any chance to access the lab session or facility with the closure of school because of the pandemic Covid-19. This certainly impacted their learning progress. This application allows users to conduct the chemistry experiment by selecting and manipulating the AR marker, in which the corresponding virtual apparatus and chemical solution are displayed. Besides, users need to perform actions such as pouring and swirling to trigger a chemical reaction. The chemical reaction is visualized through multimedia elements such as 3D apparatus, colour for heat reaction, water dropping animation etc. The application comes with error detection which is able to detect the wrong selection of markers for the chemistry experiment's step. It also contains a video module that shows real-life chemistry lab experiments for reference. Usability evaluation and feedback from 30 participants showed that respondents supported ARChemEx application able to help them in learning especially in the chemistry experiment (Usefulness - 4.30, Ease of Use -4.27, Learnability -4.41, Satisfaction – 4.36, Aesthetic – 4.48). The target market of the ARChemEx is mainly in secondary schools and universities for the chemistry experiments. It is also expandable to other similar types of experiments. ARChemEx was copyrighted with UKM (UKM.IKB.800-4/1/4017), also recognized as a bronze award in best teaching & learning innovation project trek of research@FTSM 2018, published in the TEM (-Technology, Education, Management, Informatics) journal and awarded a Teaching & Learning Grants (RM14,000.00) in 2021

Keywords: ARChemEx, chemistry, augmented reality, application

ARCHEMEX- Mobile Augmented Reality Application for Conducting Chemistry Experiment





Abstract

ARChemEx allows student to perform chemistry experiment in smartphone using augmented reality technology. Chemistry experiment is one of the main activities at school to help student to understand relevant chemistry topic through the experiment practice. However, chemistry experiment is costly, time consuming and dangerous. In additional, students do not have any chance to access the lab session or facility with the closure of school because of the pandemic Covid-19. It certainly impacted their learning progress. This application allows users to conduct the chemistry experiment by selecting and manipulating the AR marker, in which the corresponding virtual apparatus and chemical solution will be displayed. Besides, user need to perform the action such as pouring and shaking to make trigger the chemical reaction. The chemical reaction is visualized through multimedia element such as 3D apparatus, color for heat reaction, water dropping animation etc. Other than that, it also contains a video module which show the real-life chemistry lab experiments for reference.

Objective

Enable students in conducting chemistry experiment with augmented reality technology and natural

interactions to improve their learning experiences.

Usefulness



Satisfaction

5 Points Likert-scale

Commercialization Potential



secondary school & university



Design

Customizable for physic & biology

Advantages



Engaged students in chemistry experiment learning with the psychomotor action. The longer exposure of students to the app along, the more knowledge they could retain.

Novelty



Tangible **Natural** Interaction







23D Model with **Animation** In AR

Inventor



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Dr Tan Siok Yee Dr Nazatul Aini Abd Majid Nur Asylah Suwadi

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R.E.A.L E-Note Jinayah

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Abstract

Kewujudan eBook sebagai buku digital juga sebagai bahan pengajaran dan pembelajaran dapat diterima dan menjadi pilihan utama, terutama para pelajar di era pandemik. Oleh itu, R.E.A.L e-Note Jinayah merangkumi topik Hukum Jenayah Islam dibina sebagai eBook bagi menyokong pembelajaran pelajar bagi Kursus Pengajian Islam Politeknik Malaysia. Pendekatan reka bentuk dan pembangunan (DDR) tiga fasa yang diasaskan oleh Richey dan Klein (2007) diguna sebagai kaedah bagi membangunkan R.E.A.L e-Note Jinayah. Fasa pertama analisis keperluan, 3 orang pensyarah dan 5 orang pelajar ditemu bual untuk mendapatkan pandangan terhadap pembangunan R.E.A.L e-Note Jinayah ini. Fasa kedua merupakan fasa mereka bentuk dan membangunkan isi kandungan, fasa ini di nilai oleh 4 orang pakar iaitu pakar isi kandungan, reka bentuk design dan bahasa. Fasa ketiga adalah pelaksanaan ujian kebolehgunaan R.E.A.L e-Note Jinayah. Dapatan fasa pertama menunjukkan bahawa responden berpandangan positif terhadap pembinaan R.E.A.L e-Note Jinayah sebagai bahan pembelajaran yang menarik dan mudah digunakan. Fasa kedua, pakar-pakar bersetuju dari aspek kesesuaian elemen-elemen yang terdapat dalam R.E.A.L e-Note Jinayah ini. Fasa ketiga menunjukkan kebolehgunaan R.E.A.L e-Note Jinayah untuk pelajar peringkat diploma mengikut silibus yang ditetapkan. EBook ini juga mempunyai elemen-elemen multimedia yang interaktif, ia boleh dijadikan sebagai bahan pengajaran dan pembelajaran dalam talian (PDPDT) kerana ia merangkumi grafik, design dan isi pelajaran yang menarik serta mudah difahami oleh pelajar, ia juga dilengkapkan dengan nota-nota dan video tentang topik ini melalui pautan link juga QR code sebagai maklumat tambahan. Selain itu, R.E.A.L e-Note Jinayah ini juga dilengkapi dengan latihan pengukuhan bagi topik-topik yang dibincangkan untuk menguji kefahaman pelajar setelah selesai menguasai topik ini, sijil pencapaian turut di berikan kepada pelajar yang lulus dengan cemerlang. Pemahaman pelajar terhadap konsep hukum jenayah Islam diharapkan dapat memacu pembentukan generasi Muslim yang berupaya berhadapan dengan cabaran semasa dengan lebih baik

Kata Kunci: R.E.A.L e-Note Jinayah, eBook, Kursus Pengajian Islam

R.E.A.L E-Note Jinayah



Students' Engagement and Motivation in Participating Virtual Student Events

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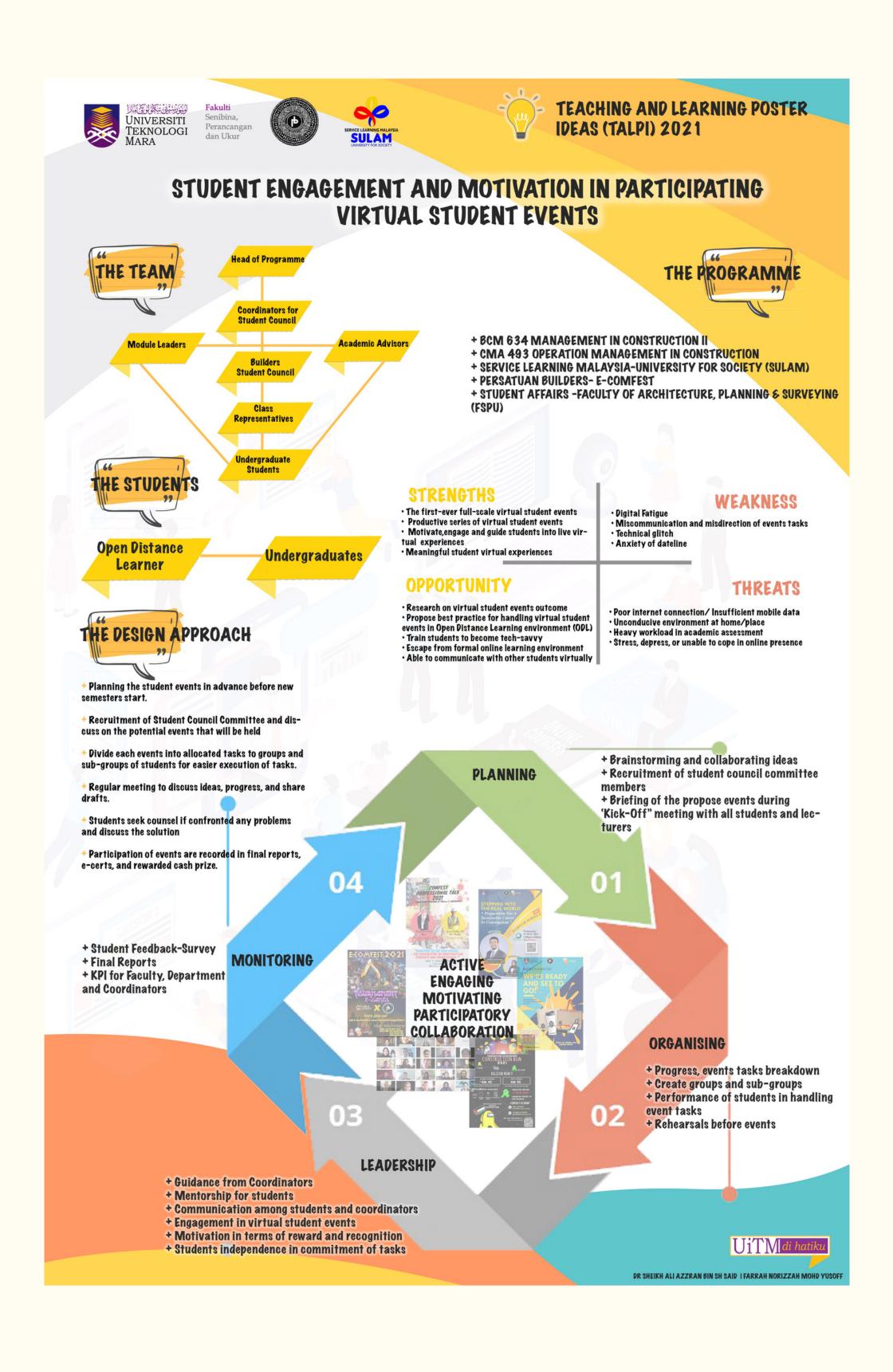
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Abstract

The swift change of physical to online class has significantly changes the educational landscape in the era of global pandemic. The use of internet for online learning has soared in unprecedented scale among students and lecturers. Research has attempted to examine the engagement and motivation of students via online learning in various academic context of higher education, but surprisingly few studies has explore on extracurricular activities as part online learning, thus affecting the students' engagement and motivation. This study propose a best practice of students' engagement and motivation in participation of virtual student events. Through the basic approach of management in construction, the study adapts the theory management function, organization structure and S.W.O.T analysis in assessing the outcome of virtual student events. The implication of this study is to better facilitate online extracurricular activities—virtual student events that can enhance the students' engagement and motivation in learning.

Keywords: Student Engagement, motivation, Virtual student events

Students' Engagement and Motivation in Participating Virtual Student Events



Mobile Educational Application: The Development of EzNomics App in Teaching Macroeconomics

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Abstract

The unexpected outbreak of COVID-19 has led millions of educators and students involved in online learning. Online learning becomes part of our new lifestyle and needs to be adapted by both educators and students. Despite that, online classes are very challenging due to various factors such as problems with the internet coverage and the student's attention during the classes. Thus, EzNomics app is developed to help educators and students teach and learn macroeconomics effectively and efficiently. EzNomics app aims to facilitate users or learners to be more productive and attain comprehensive education while experiencing interactive learning in studying this subject. The EzNomics app is based on the ADDIE instructional design model for teaching and contains seven related chapters with a variety of multimedia components such as text, graphics, audios, and animations to make this application engaging to use. Based on a survey involving students taking macroeconomics subject in UiTM Kelantan and UiTM Kedah, 85% of respondents agree that this innovation is easy to use, have an interesting screen design, easy access, and is well organized. In conclusion, the EzNomics app is hopefully able to help students achieve the best result and grade in a macroeconomics subject since the EzNomics app successfully assists students in better understanding concepts and contents of the subject. Meanwhile, this innovation has also helped educators with convenient techniques in the teaching process. With beneficial functions included, the EzNomics app can be commercialized globally, making economics easier to learn.

Keywords: EzNomics App, Mobile Educational Application, ADDIE

Mobile Educational Application: The Development of EzNomics App in Teaching Macroeconomics

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



MOBILE EDUCATIONAL APPLICATION: THE DEVELOPMENT OF EZNomics APP IN TEACHING MACROECONOMICS





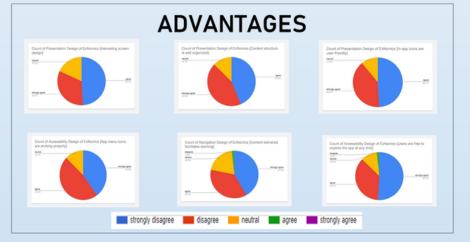






OBJECTIVES

- ❖ To help educators and students teach and learn macroeconomics effectively and efficiently.
- ❖ Aims to facilitate users or learners to be more productive and attain comprehensive education while experiencing interactive learning in studying this subject.
- ❖ Assist educators with convenient technique in the teaching process.





USEFULNESS

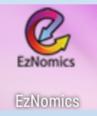
Teach and learn macroeconomics more effective and efficient.

Improve quality of teaching and learning.

Users become more productive and interested to learn macroeconomics.

Making macroeconomics easy to understand and not complicated.

Students are able achieve the best result and grade in a macroeconomics subject



NOVELTY

Ez-GDP Focus in one formula only EzNomics DVD + EDMODO
Use DVD and EDMODO as a platform

EzNomics APP

More convenient and user friendly.

Easy to use anywhere and anytime

- Mobile devices have established their significant status in this technological era because of their ability to fulfil and meet the needs of society, particularly in the educational system.
- ➤ With the theme of "love learns", EzNomics app will pique the interest of users because it is user-friendly and adaptable to educators and students.
- ➤ The EzNomics app contains seven (7) macroeconomics-related chapters with numerous multimedia components such as text, graphics, audios, and animations to make this application interesting to use on the Android platform.
- ➤ This app was created in conjunction with an exercise workbook to assist students in understanding the lecture and answering related questions.

COMMERCIALISATION POTENTIAL

- ✓ EzNomics App is an effective tool that can allow students to continue learning since it is easy to access and simple to use.
- ✓ EzNomics app will hold two pillars of IR4.0 which are *internet of things* and *systems integration*.
- ✓ In line with the Global Education Coalition aims in order to achieve the Sustainable Development Goal (SDG 4) (Quality Education) which help countries in mobilizing resources and implementing innovative and context-appropriate solutions to provide education remotely, leveraging hi-tech, low-tech and no-tech approaches.

EZNOMICS APP CAN BE COMMERCIALIZED GLOBALLY

INVENTORS NIK SURIATI NIK HASSAN NORSILAWATI MOHD HASSAN JAMILAH LAIDIN WAZUIN MAT HALIF ZATUL HIMMAH ABDUL KARIM Ts. MOHD ZAFIAN MOHD ZAWAN

Employing Video Conferencing in Learning Arabic Vocabulary: Google Meet is Exemplary

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Abstract

There was a switch from traditional face-to-face language teaching to online learning due to the Covid-19 pandemic. As reported by United Nations, Covid-19 has affected roughly 1.6 billion learners. Most instructors are needed to deliver their teaching activities in any possible way since all higher and lower educational institutions in Malaysia are closed due to this pandemic. The academicians need to equip themselves with technological knowledge and a highly skilled in providing an effective learning environment. Meanwhile, as for students, they need to adapt to this new educational process. There are diverse online platforms that have been implemented to engage the students in language online learning and one of them is Google Meet. Google Meet is widely used in higher educational institutions to spread knowledge. However, little work has been carried out to investigate online education in the Arabic language during the pandemic, especially in Malaysia. The two theories used in this study are TAM (Technology Acceptance Model) and Col (Community of Inquiry) as the guideline of implementation of the Google Meet platform which is video conferencing in learning Arabic vocabulary. This study was able to show that the use of Google Meet was effective as a language learning tool for online distance learning.

Keywords: Arabic Vocabulary, video conferencing, Google meet

Employing Video Conferencing in Learning Arabic Vocabulary: Google Meet is Exemplary



EMPLOYING VIDEO CONFERENCING IN LEARNING ARABIC VOCABULARY: GOOGLE MEET IS AN EXEMPLARY



Google Meet

ABSTRACT

There was a switch from the traditional face-to-face language teaching to online learning due to the Covid-19 pandemic. As reported by United Nations, Covid-19 has affected roughly 1.6 billion learners. Most of instructors are needed to deliver their teaching activities in any possible ways since all higher and lower educational institutions in Malaysia are closed due to this pandemic. The academicians need to equip themselves with the technological knowledges and a highly skilled in providing effective learning environment. Meanwhile, for students they need to adapt to this new educational process. There are diverse online platforms have been implemented to engage the students in language online learning and one of them is Google Meet. Google Meet is widely used in higher educational institutions to spread the knowledges. However, little work has been carried out to investigate the online education in Arabic language during the pandemic especially in Malaysia. The two theories used in this study are TAM (Technology Acceptance Model) and CoI (Community of Inquiry) as the guideline of implementation the use of Google Meet application which is video conferencing in learning Arabic vocabulary. This study was able to show that the use of Google Meet was effective as a language learning tool for the online distance learning.

Keywords: Covid-19, Google Meet, Video Conferencing, Arabic Vocabulary, Online Learning

1.0 OBJECTIVES

- 1) To explain the implementation of Google Meet in learning Arabic vocabulary.
- 2) To identify the advantages and disadvantages of Google Meet in learning Arabic vocabulary.

2.0 ADVANTAGES

- Share screen: Share Power Point and Game-based Learning platforms
- Microphone: Turn on mic to listen to pronunciation
- Jamboard: Illustrate the meaning of words
- Icon Raise Hand: Allure the attention of lecturers
- Chat Box: Ask the questions and give opinions
 Record: Make revisions at anytime.

3.0 USEFULNESS

- For teachers in school.
- For lecturers in university.
- For language instructor in private sector

4.0 NOVELTY

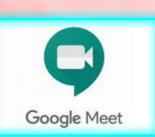
Indeed, at present, little work has been carried out to investigate the online education in Arabic language during the pandemic especially in Malaysia. Therefore, this study is an attempt to fill in the gap in the relevant literature. This study also intended to focus on the implementation of video conferencing by using Google Meet in learning Arabic vocabulary in order to realize the full potential of using Google Meet to help instructors and learners during teaching and learning.

5.0 RESEARCHERS

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Be Clear in Risk Management: COVID19 Snake & Ladder

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Abstract

BE CLEAR in Risk Management: Covid19 Snake & Ladder (Risk Management Snake & Ladder) is an educational tool, presented in the form of a board game based on the classic Snake & Ladder board game. Studies have shown that learning by playing, is one way to share knowledge with various age groups. Risk Management Snake & Ladder is to get family and society be aware of the risk involved during the Covid 19 pandemic in Malaysia. During Covid19, families normally spend their time together indoor, to reduce the risk of getting Covid19. But families need to go out to other places outside their house, to fulfill their hierarchy of needs like food, non-food items, schools, etc. Furthermore, this edugame shares with the players that risk can be positive and negative to a plan. Risk Management Snake & Ladder is to remind family members and society of the need to use MySejahtera and facemask, to reduce the risk of getting Covid19, when they want to go to public places. Risk Management Snake & Ladder is the basic edugame on risk management and Covid19. This game of introducing risk management has many potentials of expanding into different types of games for education. This game can be played by family members at home, school children at schools, while traveling, as part of reinforcing the importance of using MySejahtera and facemask, as a way to reduce the risk of getting or spreading Covid19.

Keywords: Covid19 Snake & Ladder, board game, edugame, risk management

Be Clear in Risk Management: COVID19 Snake & Ladder

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



BE CLEAR in Risk Management: Covid19 Snake & Ladder

BE CLEAR in Risk Management: Covid19 Snake & Ladder (Risk Management Snake & Ladder) is an educational tool, for risk management during Covid19, presented in the form of a board game, based on the classic Snake & Ladder board game.

1.0 OBJECTIVES

- To get family and society be aware of the risk involved during the Covid 19 pandemic in Malaysia.
- to remind family members and society the need to use MySejahtera and facemask, to reduce the risk of getting and spreading Covid19, when they want to go to public places.

3.0 USEFULNESS

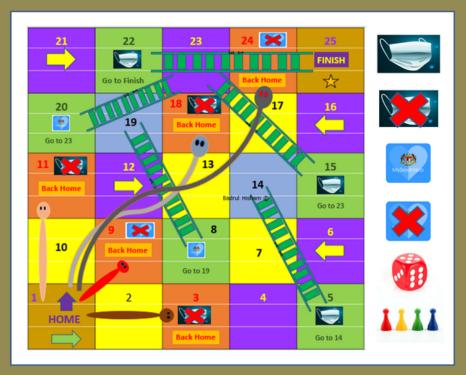
- 1. Teaching and learning of risk management of Covid19 to the public can be a done in a safe setting, such as at home, school, etc.
- Basic knowledge sharing of risk management will not be limited to normal classrooms by highly qualified person in risk management.
- This invention will help to increase the level of fundamental knowledge in risk management.

5.0 COMMERCIALISATION POTENTIAL

- BE CLEAR in Risk Management: Covid19 Snake & Ladder (Risk Management Snake & Ladder) has excellent potential for commercialization as it is a smart and simple method to educate anyone on the fundamental knowledge in risk management during Covid19.
- This education tool is suitable for all ages from 5 years old to 75 years old.

2.0 ADVANTAGES

- 1. Create **quality time** between family members while being in the house.
- Cheap and fun method to share knowledge on risk management and Covid19.



4.0 NOVELTY

- **1. Combination of education and play** on risk management using traditional Snakes & Ladders boardgame.
- 2. Teaching and reminding all ages on being safe before leaving our house during Covid19 in a fun and informal method.

6.0 INVENTORS

Badrul Hisham Hussein, Mohd Nizal Haniff, Nor'azam Mastuki, Norhaslinda Binti Kamaruddin, Shamshimah Binti Samsuddin, Akbar Kamarudin @ Abdul Shukor.

TALPI105B

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MOPTES: Modul Penjagaan Kendiri Kaki Pesakit

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Abstract

Modul penyakit diabetes dan masalah kaki yang terdapat di pusat kesihatan dan di institusi pendidikan masa kini, masih menggunakan konsep pembelajaran tradisional iaitu dalam bentuk poster, powerpoint, risalah dan PDF. Namun, rentetan daripada kajian terkini mendapati peningkatan kes amputasi kaki berlaku adalah disebabkan oleh kurangnya pengetahuan terhadap penjagaan kaki oleh pesakit dan keluarga pesakit. Oleh itu, modul pembelajaran yang efektif perlu dihasilkan kepada golongan pesakit ini, staf kesihatan dan pelajar pengajian kesihatan, sesuai dengan perubahan pembelajaran revolusi 4R ini. Berteraskan model pembelajaran ADDIE (Penaksiran-A, Rekabentuk-P, Pembangunan-P, Perlaksanaan-I dan Penilaian-E), yang telah terbukti efektif dalam menarik minat dan memotivasikan pelajar, modul Penjagaan Kendiri Kaki Diabetes telah dibangunkan. Proses pembangunan modul ini melibatkan kerjasama antara universiti dan industri kesihatan. Modul ini telah menjalani empat fasa penilaian sebelum ia dikormersialkan dan telah mendapat Intelectual Properties(IP) dalam proses pembangunan modul ini. Sasaran modul ini adalah sebagai bahan rujukan para siswa di fakulti kesihatan, kakitangan kesihatan, pesakit dan penjaga pesakit diabetes dan orang awam. Keistimewaan kandungan modul ini adalah ia berkonsepkan pembelajaran atas talian yang interaktif, mudah, ringkas, menarik dan informasi berdasarkan kajian terkini. Pelbagai perisian digunakan bagi menjadikan modul ini interaktif dan menarik iaitu perisian Genially, Canva, Powtoon dan video temuramah. Peserta yang mengikuti modul ini akan menerima sijil setelah lulus ujian serta melayakkan mereka mendapat empat mata CPD. Peserta modul juga berpeluang membuat pembelian barangan kesihatan dengan harga promosi dan paling istimewa berpeluang berinteraksi dengan pembangun modul yang pakar dalam bidang tersebut.Modul ini telah dilancarkan dan dikormesialkan bermula bulan Julai 2021 menggunakan platform Open Learning. Ia telah mendapat penjualan dan maklumbalas yang amat memberangsangkan di seluruh Malaysia dalam tempoh dua bulan. Proses pembelian yang mudah dan cepat untuk mendapatkan modul ini secara atas talian antara salah satu sebab ia menjadi pilihan pelajar dan peserta di luar sana.

Kata Kunci: MOPTES, modul, diabetes, pesakit

MOPTES: Modul Penjagaan Kendiri Kaki Pesakit



LOKMAN: Digital Storytelling for the Teaching and Learning of Primary School Children (The Mystery of Bukit Naga Legend)

Zainatul Shuhaida Abdull Rahman Nurul Labanihuda Abdull Rahman Norlela Ismail Muhammad Shakir Sharuji Muhammad Zharif Aizat Aziman Seri Murni Shaharum

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Abstract

Digital learning in education is evolving in line with technological change. Hence, the educational facilities for the Orang Asli community must be upgraded and improved so they are not left behind in the national agenda of education. Studies show that learning with multimedia elements can attract students to learn the lessons more quickly and they can adapt their fantasies into reality more convincingly. Therefore, this study proposes DIGITAL STORYTELLING (digital storytelling in the form of illustrations) that focuses on an icon that symbolizes Orang Asli primary school students called 'LOKMAN'. Lokman is conceptualized as L - Learner-Centered; O - Open; K - Know-How; M - Motivational TL methods; A - Accessible; N - Natural Settings. All children of the Orang Asli are LOKMAN. The 10-page illustrations entitled 'The Mystery of the Legend of Bukit Naga' via Digital Storytelling are suitable for the teaching and learning of primary school children. Sixty proverbs will be explained to the readers through the audio and illustrations. A set of questionnaires will be designed to collect the lessons learned through observations and interviews. The results will determine the effectiveness of the methods proposed. The sixty proverbs used in the illustrations are fun learning that would engage the students even further through digital storytelling. It is hoped that the Orang Asli children can improve their speaking skills, learning skills and lesson recall skills. Simultaneously, this method is also hoped to assist the teachers to motivate the children to learn more effectively.

Keywords: Digital storytelling, primary school children, Orang Asli

LOKMAN: Digital Storytelling for the Teaching and Learning of Primary School Children (The Mystery of Bukit Naga Legend)

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



ABSTRACT

Digital learning in education is evolving in line with the technological change. Hence, the educational facilities for the Orang Asli community must be upgraded and improved so they are not left behind in the national agenda of education. Studies show that learning with multimedia elements can attract students to learn the lessons more quickly and they can adapt their fantasies into reality more convincingly. Therefore, this study proposes DIGITAL STORYTELLING (digital storytelling in the form of illustrations) that focuses on an icon that symbolizes Orang Asli primary school students called 'LOKMAN'. Lokman is conceptualized as L - Learner-Centered; O - Open; K - Know-How; M - Motivational TL methods; A - Accessible; N - Natural Settings. All children of the Orang Asli are LOKMAN. The 10-page illustrations entitled 'The Mystery of Bukit Naga Legend' via Digital Storytelling are suitable for the teaching and learning of primary school children. Sixty proverbs will be explained to the readers .through the audio and illustrations. A set of questionnaires will be designed to collect the lessons learned through observations and interviews. The results will determine the effectiveness of the methods proposed. The sixty proverbs used in the illustrations are fun learning that would engage the students even further through digital storytelling. It is hoped that the Orang Asli children can improve their speaking skills, learning skills and lesson recall skills. Simultaneously, this method is also hoped to assist the teachers to motivate the children to learn more effectively.

1.0 OBJECTIVES

Indigenous people, also known as "orang asli," are Peninsular Malaysia's oldest community, yet they make up a small percentage of the country's total population. According to studies, about half of Orang Asli students do not continue their education after finishing primary school, and only 30% of Orang Asli students complete secondary school, which is less than half of the national average. The statistics on Orang Asli education progress are concerning for many parties, particularly the government, and there are numerous factors that contribute to the poor results (Sawalludin et al., 2020).

This project proposed due to several problems as stated below:

- ${\bf 1}.$ Children read fewer books and are more interested in online teaching and learning.
- 2. Children love colors, sounds, music and pictures visually.
- 3. Children like to imagine through pictures.
- 4. Children have difficulty memorizing idioms and proverbs.

Hence, the objective of the study to propose **LOKMAN: Digital Storytelling** For The Teaching And Learning Of Primary School Children (The Mystery Of Bukit Naga Legend). It is transaction form the traditional print form of documentation to the online digital animation.

The digital storytelling was created as part of a preliminary investigation into character design for future short animations and include the element of sixty proverb to improve their language especially in Malay language.

2.0 ADVANTAGES

- 1. Children can expand their knowledge and reading stories through visuals.
- 2. Children become more creative and innovative with teaching aids such as music and audio visuals.
- 3. Children can listen to moral stories and get taught more effectively.
- 4. Children can memorize language phrases and sixty proverbs more easily and understand the timing of their use accurately.
- 5. Children can understand the meaning of sixty proverb and able to make sentences using suitable words.

3.0 USEFULNESS

The purpose of this activity is to understand better our students' especially Orang Asli's children on their learning process. This activity involves the roles of teachers and parents to determine students 'perceptions of the use of animation. There are two methods:

- 1) The teacher or parent will show the 10-page illustrations entitled 'The Mystery of Bukit Naga Legend' via Digital Storytelling to the Orang Asli's children.
- 2) Teachers and parents measure students' perceptions by conducting interviews about what they have learned by following the question instrument surveys and observations.

The questionnaire instrument was adapted from Hat et al., (2013)

- 1. Provide better outcomes for the learning of Orang Asli's children.
- 2. Help Orang Asli's children improve their speaking skills.3. Help Orang Asli's children remember what is being taught.
- 4. Help Orang Asli's children understand lessons quickly.
- 5. Help Orang Asli's children to pay attention to the current.
- 6. Bring fun to Orang Asli's children.7. Make Orang Asli's children more enthusiastic while following.
- 8. Create a more cheerful learning environment for Orang Asli's children.
 9. Help Orang Asli's children apply what they have learned in daily life.
- 10. To make the teaching of teachers orderly and planned to Orang Asli's children.

4.0 NOVELTY

- The LOKMAN: Digital Storytelling For The Teaching And Learning Of Primary School Children (The Mystery Of Bukit Naga Legend) which incorporates the student, lecturer and parents to have attractive method in delivering the activities.
- The digital storytelling reveal a human fantasy into reality that has never been explored.
- The digital storytelling focuses on Orang Asli primary school student (Learner-centred) called Lokman and his contacts with the open, know-how, motivational teaching and learning methods that are accessible in natural settings.

LOKMAN'

- L Learner -Centered
- O Open
 K Know-
- K Know-HowM Motivational
- M Motivationa
 A Accessible
- N Natural Conceptualization

5.0 COMMERCIALISATION POTENTIAL

- ${\boldsymbol{\cdot}}$ This digital storytelling can be easily applied by teacher, students and
- It will be sold to the COAC (Centre of Orang Asli Concerns) or non-
- governmental organisations (NGOs).

 As part of the marketing strategy, it will be promoted on digital platforms,

6.0 INVENTORS

particularly social media.

Project Leader: Dr Zainatul Shuhaida Abdull Rahman

Project Members: Dr Nurul Labanihuda Abdull Rahman, Norlela Ismail, Muhammad Zharif Aizat Bin Aziman, Muhammad Shakir Bin Sharuji, Seri Murni Binti Shaharum

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TEXTRAPOLY 3.0

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Abstract

The positive relationship between reading competency and English language literacy among ESL learners has been proven in many previous researches. The skill of reading, be it novel reading to billboard signage reading, is crucial in helping a person to become engrossed and associated with his surroundings. Nonetheless, the constraints that ESL learners with reading difficulties experience frequently exceed their willingness to focus on L2 reading resources. As a result, TEXTRAPOLY 3.0 is designed to help ESL learners improve their reading abilities. The Monopoly game concept is used in designing this interactive board game. The numerous intriguing elements incorporated in TEXTRAPOLY are believed to be tremendous assistance to ESL learners in developing their reading abilities and, as a result, their overall literacy achievement.

Keywords: TEXTRAPOLY 3.0, language literacy, ESL learners

TEXTRAPOLY 3.0

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021

TEXTRAPOLY 3.0

One world. Many stories.

By:

Nurul Hijah Jasman, Nursuhaila Ibrahim, Nur Alyani

Khairol Anuar, Muhammad Irfan Mokhtar

ABSTRACT

Positive relationship between reading competency and English language literacy among ESL learners has been proven in many previous researches. The skill of reading, be it novel reading to billboard signage reading, is crucial in helping a person to become engrossed and associated with his surroundings. Nonetheless, the constraints that ESL learners with reading difficulties experience frequently exceed their willingness to focus on L2 reading resources. As a result, TEXTRAPOLY 3.0 is designed to help ESL learners improve their reading abilities. The Monopoly game concept is used in designing this interactive board game. The numerous intriguing elements incorporated in TEXTRAPOLY 3.0 are believed to be a tremendous assistance to ESL learners in developing their reading abilities and, as a result, their overall literacy achievement.

1.0 OBJECTIVES

- To design a board game that can be used for teaching and learning purposes.
- To help teachers and students to have an entertaining and informative lesson in classroom.

TEXTRAPOLY 3.0 is conducive for many parties.

3.0 USEFULNESS

It provides an alternative method in improving and enhancing reading skill.

It has huge potential in assisting academicians in teaching process and students in learning process.

It helps any individual to comprehend the basic skill in reading at their own pace and space.

2.0 NOVELTY AND ADVANTAGES

Equip players with general knowledge about Asian countries.

Develop new material to assist both teachers and students.

Demonstrate the concept of fun learning.

Improve and enhance players' reading skills.

4.0 COMMERCIALISATION POTENTIAL

Practical board game that can be used for both formal and informal settings.

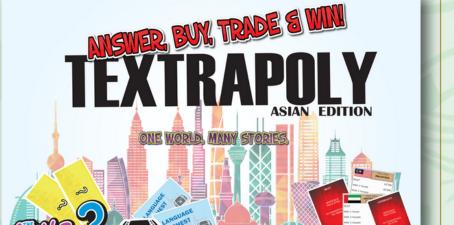
Teaching and learning equipment especially for language studies with the focus on reading skills.

available online, TEXTRAPOLY 3.0 would be advantageous for all ESL learners.

With a future plan to make this



6.0 ACHIEVEMENT & RECOGNITION



- Silver Award IIDEX 2020
- Silver award International Digital Invention, Innovation & Design 2019
- Bronze award International Penang Invention, Innovation & Design 2019
- Research Paper: Students' Perception of Using Textrapoly in the Teaching of Reading Skill in ESL Classroom
- Intellectual Property Recognition (IPR), MyIPO: LY2019001830

The Application of Game-Based Learning Model (GBLM) Through Real-Time Online Game for Tertiary Education

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Abstract

The recent Covid-19 pandemic calls for instructors and students to engage creatively in an e-learning approach to further strengthen the country's education industry while protecting community health. However, there are doubts that the learning process may lack engagement due to inconsistencies of e-learning approaches, which may not be as effective as the face-to-face setting. On the other hand, game-based learning (GBL) has been a popular approach among instructors in their teaching method. Nevertheless, many argue the effectiveness of GBL, which lacks several essential elements such as engagement and fun factors in teaching and learning. Therefore, this innovation improved engagement through the real-time online game approach by adopting the Game-Based Learning Model (GBLM) using the Quizizz application for the Introduction to International Business course. Emphasizing rewards and enjoyment factor proves that students' engagement gets better in the cognitive and sociocultural perspective. As a result, students performed remarkably well in their quizzes and final assessment. In the future, the GBLM can be applied by instructors to diversify their approaches in other courses and levels of education by engaging in real-time online games.

Keywords: Game-based learning (GBL) model, Real-Time Online Game, tertiary education

The Application of Game-Based Learning Model (GBLM) Through Real-Time Online Game for Tertiary Education

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021

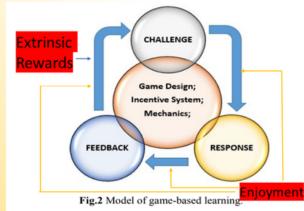
REGISTRATION ID: TALPI109B

THE APPLICATION OF GAME-BASED LEARNING MODEL (GBLM) THROUGH
REAL-TIME ONLINE GAME FOR TERTIARY EDUCATION
By: Franklin Hazley Lai & Sharifah Nurafizah Syed Annuar

ABSTRACT

The recent Covid-19 pandemic calls for instructors and students to engage creatively in an e-learning approach to further strengthen the country's education industry while protecting community health. However, there are doubts that the learning process may lack engagement due to inconsistencies of e-learning approaches, which may not be as effective as the face-to-face setting. On the other hand, game-based learning (GBL) has been a popular approach among instructors in their teaching method. Nevertheless, many argue the effectiveness of GBL, which lacks several essential elements such as engagement and fun factors in teaching and learning. Therefore, this innovation improved engagement through the real-time online game approach by adopting the Game-Based Learning Model (GBLM) using the Quizizz application for the Introduction to International Business course. Emphasizing extrinsic rewards and enjoyment factor proves that students' engagement gets better in the cognitive and sociocultural perspective. As a result, students performed remarkably well in their quizzes and final assessment. In the future, the GBLM real-time online games can be applied by instructors to diversify their approaches in other courses and levels of education by engaging in real-time online games.

IDEA



Applying Game-Based Learning Model (Gentile, Groves & Gentile, 2014) in online learning

Introduced element of Extrinsic rewards and Enjoyment

To create strong engagement in online learning in cognitive & sociocultural perspective.

Novelty: Embedded Real-Time Online Game app (Quiizz) to create real enjoyment when performing game.

Introduction to International Business course (Management subject): Highly theoretical course

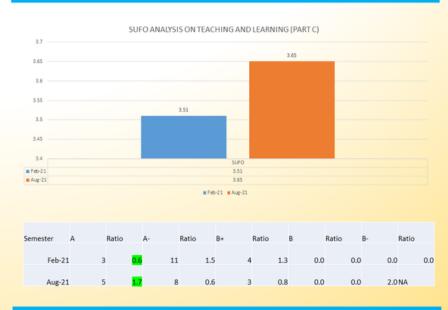
COMMERCIALIZATION

The GBLM real-time online games can be applied by instructors to diversify their approaches in other courses and levels of education by engaging in real-time online games.

Limitation:

Any real-time online games rely on the internet speed and connection to deliver better experience. With the Jalinan Digital Negara (JENDELA), it is hope that it will improve connectivity and productivity in the future.

OUTCOME (Quantifiable)



OUTCOME (Non-Quantifiable)





Note: Video and other materials can be viewed in the presentation slides.

5 Tip Mudah Hasilkan Ebook Asli

Intan Idiana Hassan Abd Karim Alias

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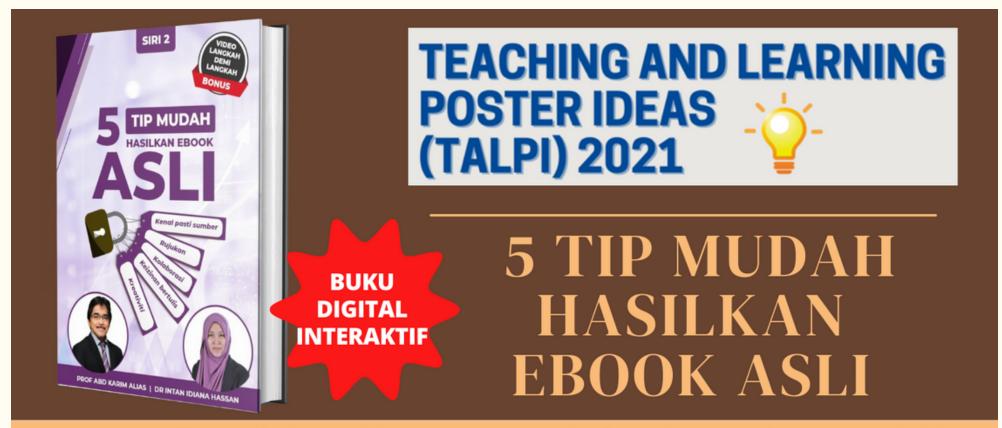
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Abstract

Karya asli adalah salah satu syarat utama bagi mendapat hak cipta dan membolehkan ia mendapat perlindungan di bawah Akta Hak Cipta 1987. Namun, sering terjadi penulis dituduh menciplak karya penulis lain tanpa mereka sedari. Ini menyebabkan berlakunya pelanggaran akta hak cipta 1987. Menurut kajian, kes ini berlaku disebabkan kurangnya pengetahuan penulis berkaitan isu hak cipta atau ciplak. Oleh itu, ilmu berkaitan karya asli perlu disebarkan kepada semua penulis pada awal fasa penulisan bagi membantu penulis menghasilkan ebook yang bebas unsur ciplak yang akan sekaligus membunuh keaslian sesebuah karya. Bagi memastikan keberkesanan ilmu yang diberikan, penyampaian yang interaktif, mudah dan menarik perlu ditekankan. Ebook ini telah dihasilkan berteraskan konsep interaktif, infografik serta video tutorial langkah demi langkah tip menghasilkan karya asli. Sasaran ebook ini adalah kepada golongan pelajar siswazah di pusat pengajian tinggi seluruh Malaysia, penulis dan usahawan ebook, para akademik, jurulatih ebook di bawah Kelab Keusahawan Ebook Malaysia dan dijadikan modul pengajaran dalam Bengkel Tulis Ebook. Ini adalah ebook pertama yang dipersembahkan dalam bentuk ebook interaktif dan telah mendapat EISBN. Ia dilancar dan dikormesialkan bermula bulan November 2020 menggunakan platform Evenchise. Ebook ini begitu laris di pasaran dan telah beberapa kali menduduki carta Top 5 Best Seller Ebook. Proses pembelian yang mudah dan cepat untuk mendapatkan ebook ini secara atas talian antara salah satu sebab ia menjadi pilihan pelajar dan peserta di dalam dan luar negara. Para pembaca dan penulis juga berpeluang berinteraksi antara satu sama lain melalui platform digital ini.

Kata Kunci: Ebook, video tutorial, tip

5 Tip Mudah Hasilkan Ebook Asli



Karya asli adalah salah satu syarat utama bagi mendapat hak cipta dan membolehkan mendapat perlindungan dibawah Akta Hak Cipta 1987. Namun, sering terjadi penulis dituduh menciplak karya penulis lain tanpa mereka sedari. Menurut kajian, kes ini berlaku disebabkan kurangnya pengetahuan penulis berkaitan isu hak cipta atau ABSTRAK ciplak. Oleh itu, ilmu berkaitan karya asli perlu disebarkan kepada semua penulis pada awal fasa penulisan bagi membantu penulis menghasilkan karya asli mereka sendiri. Bagi memastikan keberkesanan ilmu yang diberikan, penyampaian yang interaktif, mudah dan menarik perlu ditekankan. .

OBJEKTIF	Menghasilkan rujukan kepada penulis dalam menghasilkan karya asli yang bebas unsur ciplak menggunakan kaedah penyampaian interaktif digital	
KEGUNAAN	MODUL BENGKEL PENULISAN BUKU DIGITAL RUJUKAN	Telah menjadi modul pengajaran Bengkel Penulisan Buku Digital seluruh Malaysia,Singapura & Indonesia di bawah anjuran Kelab Penulis Muda Ebook Malaysia. Menjadi rujukan para akademik di institusi pengajian tinggi
KEISTIMEWAAN	PRESENTASI UNIK	Gaya persembahan kandungan yang menarik, interaktif, infografik serta video tutorial yang mudah difahami oleh semua golongan pembaca.
	INTERAKSI PENULIS	Pembaca dan penulis berpeluang berinteraksi secara terus

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- "Top Achiever **Ebook Sales** 2021"



NOVELTY

Karya pertama yang diketengahkan dalam bentuk buku digital interaktif

e ISBN 978-967-19608-0-6



INVENTORS



Prof Abd Karim Alias

DIGITAL TECHNOLOGY IN TEACHING & LEARNING



QVAC (Quick Visualization of Auditing Cycle)

Susana Narawi
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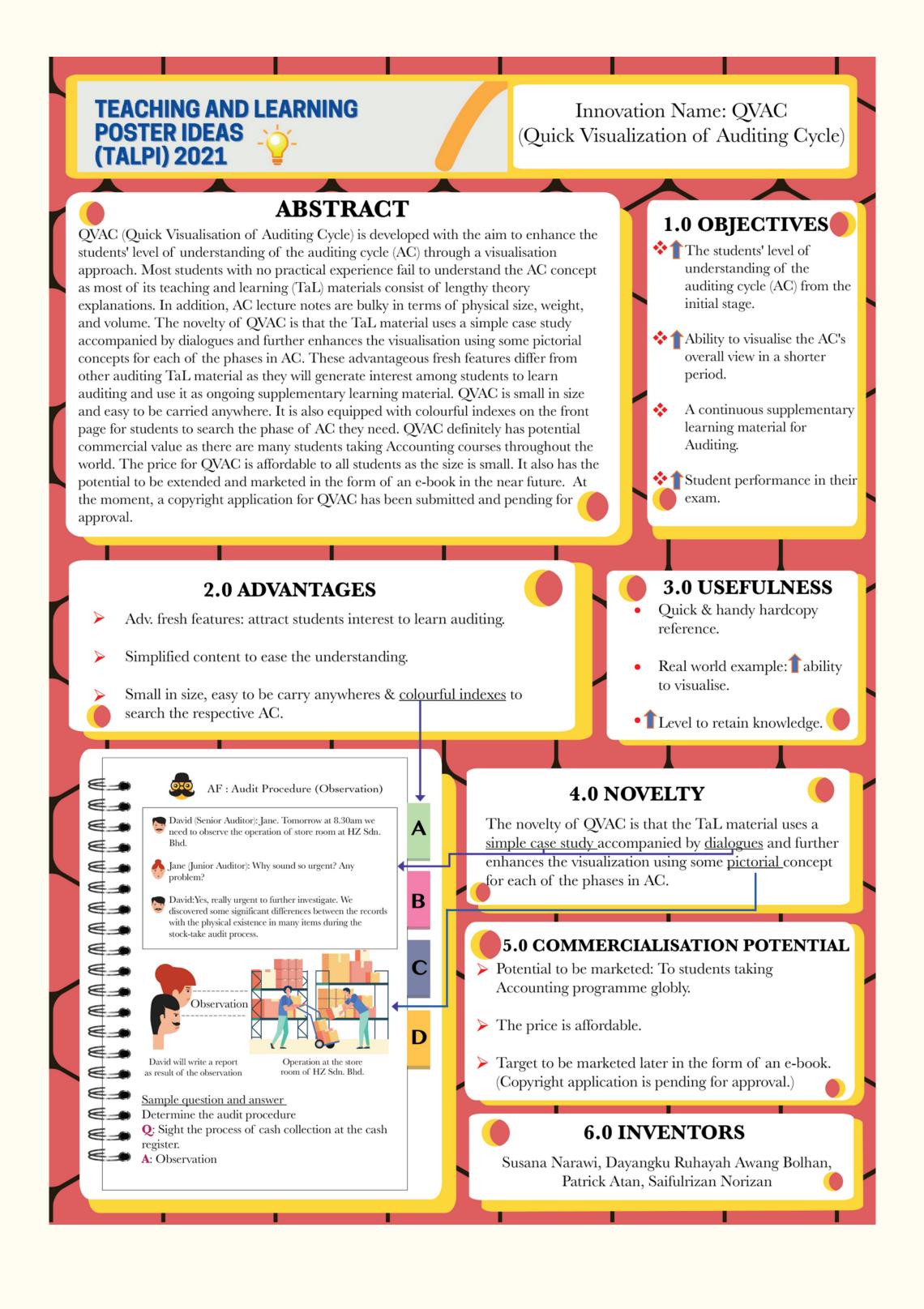
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Abstract

TQVAC (Quick Visualisation of Auditing Cycle) is developed with the aim to enhance the students' level of understanding of the auditing cycle (AC) through a visualization approach. Most students with no practical experience fail to understand the AC concept as most of its teaching and learning (TaL) materials consist of lengthy theory explanations. In addition, AC lecture notes are bulky in terms of physical size, weight, and volume. The novelty of QVAC is that the TaL material uses a simple case study accompanied by dialogues and further enhances the visualization using some pictorial concepts for each of the phases in AC. These advantageous fresh features differ from other auditing TaL material as they will generate interest among students to learn auditing and use it as ongoing supplementary learning material. QVAC is small in size and easy to be carried anywhere. It is also equipped with colorful indexes on the front page for students to search the phase of AC they need. QVAC definitely has potential commercial value as there are many students taking Accounting courses throughout the world. The price for QVAC is affordable to all students as the size is small. It also has the potential to be extended and marketed in the form of an e-book in the near future. At the moment, a copyright application for QVAC has been submitted and is pending approval.

Keywords: QVAC, e-book, auditing cycle

QVAC (Quick Visualization of Auditing Cycle)



The EZ Pack of Legal Aspect and Bioethics in Nursing

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Abstract

Legal and ethics education in nursing provides a critical foundation for addressing ethical questions that arise in the patient- health care provider relationship. Concerning the importance of legal and bioethics in nursing, "The EZ pack of legal and bioethics in nursing" has been developed to help educators and learners to obtain current information and materials on the legal aspect and bioethics in nursing practices. The resources in "The EZ pack of legal and bioethics in nursing" is now being made available for online access, and USB Memory Stick and CD for offline access. The product covers several important topics and further resources will be added from time to time in subsequent distributions. The content of "The EZ pack of legal and bioethics in nursing" is specialized on the legal aspect and bioethics in nursing practices course with written materials, video lectures, quizzes, and self-tests (with answers). This product has been developed by expert content lecturers in their respective expertise and has been integrated with the UiTM syllabus and the Ministry of Health nursing curriculum. Educators and learners can utilize the contents such as reading the written materials, viewing the teaching video, attempting the included assignments, and using the self-tests to evaluate their learning performance. "The EZ pack of legal and bioethics in nursing" is designed to provide freely available, quality academic and instructional materials for legal and bioethics to learners and educators, to complement and enhance the legal and bioethics in nursing practices, with or without the need for internet access. This product has commercialization potential in many ways such as can be open for public access and will be charged a small amount for registration as a member. In addition, it can provide a look at reciprocal business and education partnerships, which represent networking of relationships between countries.

Keywords: legal issues, bioethics in nursing, easy access teaching materials

The EZ Pack of Legal Aspect and Bioethics in Nursing





THE EZ PACK OF THE LEGAL ASPECT & BIOETHICS IN NURSING **ABSTRACT**

Legal and ethics education in nursing provides a critical foundation for addressing ethical questions that arise in the patient- health care provider relationship. These questions are many and often include central concerns surrounding truthtelling, informed consent, and protecting the rights and welfare of patients and families in decision making. Concerning the importance of legal and bioethics in nursing, "The EZ pack of legal and bioethics in nursing" has been developed to help the educators and learners to obtain current information and materials on the legal aspect and bioethics in nursing practices. The resources in "The EZ pack of legal and bioethics in nursing" is now being made available for online access, and USB Memory Stick and CD for offline access. The product covers several important topics and further resources will be added from time to time in subsequent distributions. The content of "The EZ pack of legal and bioethics in nursing" is specialized on the legal aspect and bioethics in nursing practices course with written materials, video lectures, quizzes, and self-tests (with answers). This product has been developed by expert content lecturers in their respective expertise and has been integrated with the UiTM syllabus and the Ministry of Health nursing curriculum. Educators and learners can utilize the contents such as read the written materials, view the teaching video, attempt the included assignments, and use the selftests to evaluate their learning performance. "The EZ pack of legal and bioethics in nursing" is designed to provide freely available, quality academic and instructional materials for legal and bioethics to learners and educators, to complement and enhance the legal and bioethics in nursing practices, with or without the need for internet access. The USB Memory Sticks and CD can be shared with an unlimited number of faculties and learners. Keywords: legal issues, bioethics in nursing, easy access teaching materials



OBJECTIVE

- 1.To provide an interesting and interactive online and offline learning and teaching
- To provide an easy access to the learning materials related to legal and bioethics in nursing





ADVANTAGES

- Provides online and offline access.
- Online user click the shared link or QR code
- Offline user register and will receive one USB Memory Sticks or CD that consist of the information on the product.



USEFULLNESS

- As a quick reference &pre reading for students in doing their revision
- Students also can evaluate their understanding by joining the provided guizzes





This product is the online and offline access. Online can direct to the link or QR Quote while offline can request the contents to be placed in the CD or **USB Memory Sticks**



Registration **Networking of** fee for relationship joining as a with other member countries Provides reciprocal business and education partnerships



The contents of the product can be exported in various types of files such as save as image, PDF, CSV, and excel spreadsheet



COMMERCIALIZATION **POTENTIAL**





https://padlet.com/shasyaadrian88/p21m3hzklov5cftw









INVENTORS

Ts Dr Sharifah Shafinaz, Pn Fatimah Sham, Pn Noorlaila Abu Samah & Pn Suzana Yusof

PERMATA Tracking Systems

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Abstract

PERMATA Tracking System is a system developed to track student achievements that achieved CGPA below 2.50. PERMATA'S was chosen as symbolic to students who always valued and became a priority to the Faculty of Business and Management and UiTM in particular. An effort must be made to ensure that the students are not left behind and continue and improve their academic achievements in the examination results. PERMATA Tracking System will help monitor the progress of students who obtained CGPA below 2.50 starting from semester two until they graduate. The data from the PERMATA Tracking Systems will be placed the students under the PERMATA Programme. Then the faculty will think of the best way to assist these students, such as Mentoring, Motivational programs for students to know their potential, and other learning processes that will be carried out for the coming semester. If the students under the PERMATA Programme showed improvement in their academics, it would be a great success for the Faculty of Business and Management. Still, if the students do not show improvement but decline, the faculty will always assist and plan the best programs to inspire the students.

Keywords: PERMATA Tracking System, Faculty of Business and Management, CGPA

PERMATA Tracking Systems



Fakulti Pengurusan dan Perniagaan







PERMATA TRACKING SYSTEM

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021





ABSTRACT:

PERMATA Tracking System is a system developed to track student achievements that achieved CGPA below 2.50. PERMATA'S was chosen as symbolic to students who always valued and became a priority to the Faculty of Business and Management and UiTM in particular. An effort must be made to ensure that the students are not left behind and continue and improve their academic achievements in the examination results.PERMATA Tracking System will help monitor the progress of students who obtained CGPA below 2.50 starting from semester two until they graduate. The data from the PERMATA Tracking Systems will be placed the students under the PERMATA Programme. Then the faculty will think of the best way to assist these students, such as Mentoring, Motivational programs for students to know their potential, and other learning processes that will be carried out for the coming semester. If the students under the PERMATA Programme showed improvement in their academics, it would be a great success for the Faculty of Business and Management. Still, if the students do not show improvement but decline, the faculty will always assist and plan the best programs to inspire the students.

OBJECTIVES

- Help to monitor the progress of students who obtained CGPA below 2.50 starting from semester two until they graduate.
- Assist the faculty in providing suitable programmes to help students improve their academic achievement and complete their studies within the stipulated time frame

ADVANTAGES

- able to track student performance.
- create suitable program to help student enhance their academic performance.
- help the student to graduate on time (GOT).

NOVELTY

- PERMATA Tracking System is a system developed to track student achievements that achieved CGPA below 2.50.
- PERMATA'S was chosen as symbolic to students who always valued and became a priority to the Faculty of Business and Management and UiTM in particular.
- An effort must be made to ensure that the students are not left be<mark>hind and continue and</mark> improve their academic achievements in the examination results.
- PERMATA Tracking System will help monitor the progress of students who obtained CGPA below 2.50 starting from semester two until they graduate.

COMMERCIALIZATION

- PERMATA Tracking system will be used by lecturers or academic advisers in UiTM
- Very easy to use, it can be accessed wherever the lecturer is
- Save time for lecturers and faculty in gathering information to assist students CGPA below 2.50, especially in their studies.

- . MAZUIN MAT HALIF
- . IBHRAHIM BIN ZAKARIA PROF. NAREHAN HASSAN
- DR. ZARINA DENAN . MOHD FAIZUL HASSAN · AHMAD ZUHAIRI ZAINUDDIN



















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RURAGOGY

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Abstrak

RURAGOGY merupakan strategi ODL (Online Distance Learning) bagi pelajar pedalaman dalam subjek IDA102 (Manusia dan Agama) di UiTM Kota Kinabalu ketika pandemik COVID-19. Secara umumnya, ODL mengalami banyak kekangan disebabkan perbezaan profil dan demorafi pelajar yang berselerak di pelbagai tempat di seluruh negara. Terdapat dalam kalangan pelajar yang tinggal di kawasan pedalaman, mempunyai rangkaian internet yang lemah dan datang daripada keluarga yang miskin. Justeru, pensyarah sukar untuk menjalankan ODL secara synchronous dengan efektif kerana tidak terdapat strategi PdP bagi pelajar pedalaman yang boleh dijadikan panduan. Tambahan pula IDA102 tidak boleh dijalankan secara asynchronous kerana bersifat fakta dan abstrak yang memerlukan perhatian langsung daripada pensyarah untuk mengelak miskonsepsi daripada berlaku. Faktorfaktor inilah yang menjadi titik tolak kepada penghasilan strategi RURAGOGY. Strategi ini mempunyai beberapa peringkat untuk menghasilkan ODL yang sesuai dengan kehendak dan latar belakang pelajar iaitu empati, idea, prototaip, ujian dan penggunaan. Empati merupakan langkah untuk mengenal pasti pelajar pedalaman dan masalah ODL yang dihadapi oleh golongan pelajar ini, idea pula ialah proses brainstorming untuk membezakan proses ODL mengikut situasi pelajar, peringkat prototaip adalah proses membangunkan pelantar ODL sesuai dengan dapatan di peringkat empati dan idea, ujian dijalankan untuk menguji keberkesanan pelantar yang dibangunkan dan peringkat pelaksanaan pula ialah proses pelaksanaan PdP berdasarkan konsep PAK21. RURAGOGY memudahkan ODL dengan menggunakan rangkaian internet yang rendah. PdP dapat dijalankan secara 3 hala antara guru dengan pelajar, pelajar dengan guru atau pun antara pelajar dengan pelajar. Interaksi dan motivasi pelajar meningkat kerana dapat menjalani PdP secara aktif dengan rakan sekelas. RURAGOGY boleh diaplikasikan dalam semua institusi pendidikan kerana strategi ini bersifat fleksibel dan sesuai digunakan dalam semua keadaaan proses PdP.

Kata Kunci: RURAGOGY,ODL (Online Distance Learning), PdP

RURAGOGY

RURAGOGY

01 ABSTRAK

RURAGOGY merupakan strategi ODL (Online Distance Learning) bagi pelajar pedalaman dalam subjek IDA102 (Manusia dan Agama) di UiTM Kota Kinabalu ketika pandemik COVID-19. Secara umumnya, ODL mengalami banyak kekangan disebabkan perbezaan profil dan demorafi pelajar yang berselerak di pelbagai tempat di seluruh negara. Justeru, pensyarah sukar untuk menjalankan ODL secara synchronous dengan efektif kerana tidak terdapat strategi PdP bagi pelajar pedalaman yang boleh dijadikan panduan. Tambahan pula IDA102 tidak boleh dijalankan secara asynchronous kerana bersifat fakta dan abstrak yang memerlukan perhatian langsung daripada pensyarah untuk mengelak miskonsepsi daripada berlaku. Faktor-faktor inilah yang menjadi titik tolak kepada penghasilan strategi RURAGOGY. RURAGOGY memudahkan ODL dengan menggunakan rangkaian internet yang rendah. PdP dapat dijalankan secara 3 hala antara guru dengan pelajar, pelajar dengan guru atau pun antara pelajar dengan pelajar. Interaksi dan motivasi pelajar meningkat kerana dapat menjalani PdP secara aktif dengan rakan sekelas. RURAGOGY boleh diaplikasikan dalam semua institusi pendidikan kerana strategi ini bersifat fleksibel dan sesuai digunakan dalam semua keadaaan proses PdP.

02 OBJEKTIF

Membina strategi ODL secara synchronous learning bagi pelajar pedalaman dalam kursus IDA102 (Manusia dan Agama) di UiTM Kota Kinabalu.

03 NOVELTI

SEBELUM

Pembelajaran kendiri. Tiada interaksi antara rakan sekelas dan pensyarah. Pelajar mengalami masalah pembelajaran.

SELEPAS

Pembelajaran secara langsung. Berlaku interaksi aktif antara pelajar antara rakan sekelas dan pensyarah. Masalah pembelajaran dapat diatasi secara langsung.

04 KEGUNAAN

- Membentuk ruang pembelajaran imersif untuk pelajar pedalaman secara ODL.
- 2 ODL norma baharu ketika pandemik COVID-19.
- 3 Pembelajaran abad ke-21 berasaskan 4K1N.
- 4 Meningkatkan motivasi pelajar.

05 KELEBIHAN

- 1 Fleksibel dan mudah digunakan
- 2 Sesuai dengan kemampuan pelajar
- 3 Menjimatkan masa dan kos
- 4 Membentuk PdP berkesan

06 PENGKOMERSILAN

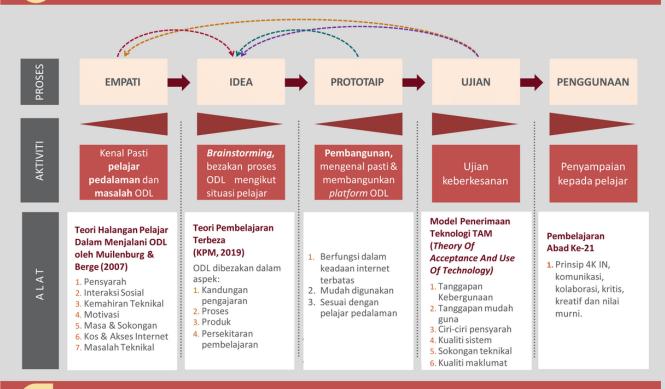
1 Sedia digunakan

Sesuai diaplikasikan dalam semua situasi dan institusi pendidikan

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



07 KERANGKA KONSEP RURAGOGY



08 APLIKASI DALAM PDP

EMPATI

• Proses mengenal pasti demografi dan masalah PdP pelajar pedalaman.

IDEA

- Masalah pelajar pedalaman diatasi menggunakan Teori Pembelajaran Terbeza (KPM, 2019).
- Dalam konteks kursus IDA102, ODL dibezakan dalam aspek proses pengajaran kerana perbezaan utama di antara pelajar bandar dan pedalaman berkaitan rangkaian internet.
- ODL bagi pelajar yang mempunyai rangkaian internet yang stabil dijalankan dengan menggunakan video conference. Manakala ODL bagi pelajar yang mempunyai rangkaian internet yang rendah dilaksanakan berasaskan teks, gambar dan video sesuai dengan menggunakan platform yang dipilih.

PROTOTAIP

- Pelajar memilih *platform* ODL berdasarkan kesesuaian rangkaian internet masing-masing.
- Pelajar diagihkan kepada beberapa kumpulan kecil mengikut *platform* yang dipilih.
- Semua kumpulan dikumpul dalam sebuah aplikasi untuk memudahkan pemantauan pensyarah.

UJIAN

• Ujian dengan menggunakan model TAM.

PENGGUNAAN

 Pelaksanaan ODL adalah berasaskan konsep PAK-21 berasaskan prinsip 4K1N.



09 KAJIAN

KAJIAN PENERIMAAN TEKOLOGI MENGGUNAKAN
THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY (TAM)
Jadual 1. Analisis deskriptif penerimaan pelajar (N260)

	FAKTOR	MIN	SISIHAN PIAWAI
	Tanggapan Kebergunaan	4.00	0.52
	Tanggapan Mudah Guna	4.00	0.49
	Ciri-ciri Pensyarah	4.00	0.50
	Kualiti Sistem	3.98	0.53
	Sokongan Teknikal	3.90	0.60
	Kualiti Maklumat	3.93	0.58

10 INOVATOR



Makhraj of Arabic Letters

Ashraf Abdul Rahman Sharifah Raudzah S Mahadi Khairunnisa Mohd Daud Nursyafira Diyana Azman

Universiti Teknologi Mara Perak Branch Seri Iskandar Campus

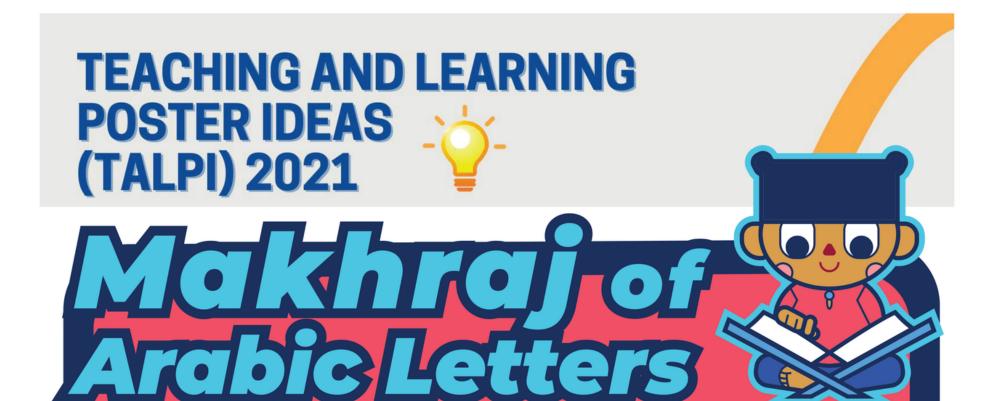
Emel: ashra769@uitm.edu.my1

Abstract

Makhraj of Arabic Letters is an interactive learning application that focuses on the constructive practice of articulation in pronouncing Arabic alphabet letters. This application aims to help the users to have a better understanding of Makhraj and articulate the correct makhraj of Arabic letters especially while reciting Al-Quran. Different articulations of a verse might have a different meaning or change the actual meaning. The main objective is to educate people, especially Muslims, to learn and to improve their Arabic letters pronunciation as well as improving their Al-Quran recitation Thus, this application is developed by providing ways to pronounce or articulate letters through animation in order to enhance understanding through visualization of the oral cavity, tongue, lips, throat, nose and teeth movements involved in pronouncing each letter. The integration of multimedia elements can help to improve Arabic letters sounds and pronunciations through self-learning among Muslims. This broad usage of Makhraj application proves that commercialization is possible.

Keywords: Makhraj of Arabic Letters, interactive, learning application, Al-Quran recitation

Makhraj of Arabic Letters



Abstract

Makhraj of Arabic Letters is an interactive learning application which focuses on constructive practice of articulation in pronouncing Arabic alphabet letters. This application aims to educate people, especially Muslims, to learn and to improve their Arabic letters pronunciation as well as improving their Al-Quran recitation. Thus, this application is developed by providing the ways to pronounce or articulate letters through animation in order to enhance understanding through visualization of the oral cavity, tongue, lips, throat, nose and teeth movements involved in pronouncing each letter. This broad usage of Makhraj application proves that commercialization is possible.

1.0 Objectives

To educate people, especially Muslims, to learn and to improve their Arabic letters pronunciation

To promote fun learning in articulating the correct Makhraj

Constructive learning application with the existence of the selection of colours, characters and animation

3.0 Usefulness

Technology friendly

Learning at one's own time and pace Helpful for Muallaf

Advancement of technology

5.0 Commercialization

On-the-Go App

Target users: all age groups (children to adults)

Potential Market: Muslim and Muallaf users

2.0 Advantages

Android application: user friendly to digital natives' generation

New style, new look and variety of animation to aid more understanding on the articulation of Arabic letters

Provide excitement while learning the correct articulation of each letters

4.0 Novelty

First mobile application that can be found in the PlayStore which aids the users to have access anywhere.

The mobile application focuses on meetings guidelines.

The mobile application integrates animation in order to show the correct articulation of Makhraj

Inventors

Makhraj of Arabic Letters
Ashraf Abdul Rahaman
Sharifah Raudzah S Mahadi
Khairunnisa Mohd Daud
Nursyafira Diyana Azman

Jazz Guitar Improvisation and the Phonetics of Scat singing

Rizal Ezuan Zulkifly Tony Siti Nur Hajarul Aswad Shakeeb Arsalaan Bajunid

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Abstract

Musicians and scholars define scat as a vocal improvisation using phonetic sounds similar to the instrumental sounds of jazz. Several Jazz guitar improvisers often include scat singing in live performances, phonetically imitating their instrumental sounds. However, this combination still maintains its challenges and difficulty with the impromptu exploitation of the vocal register producing a wide range of sounds simultaneously with the articulation and tone of the guitar. In this presentation, we propose a self-emulation online demonstration video that juxtaposes scatting with the guitar as a combination, extending the possibilities of timbre and articulation in an actual setting. The design is to accommodate musicians and guitarists with the submission of visual recordings. A live performance video snippet provides complex and straightforward examples of improvised melody, rhythm, syllables and pitch register, voice, and guitar, which drives the resulting instrument and vocal sound. Results show through post-test observation of the accuracy and fluency of both vocal scat and guitar improvisation to measure the effectiveness and available musical options. Findings have shown that audio and visual examples of the melodic range, rhythmic intensity, articulation, and phrasing through a live performance prove to be an effective outcome. It provides a more accurate observation and auditory enhancement and, more distinctively a life-long learning material for future musicians.

Keywords: Jazz Guitar, phonetics, music, scat singing

Jazz Guitar Improvisation and the Phonetics of Scat singing







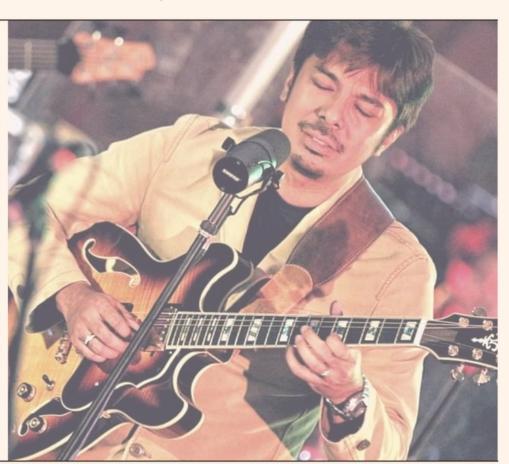
Jazz Guitar Improvisation and the Phonetics of Scat Singing

Inventors

Rizal Ezuan Zulkifly Tony Siti Nur Hajarul Aswad Shakeeb Arsalaan Bajunid

Abstract

Musicians and scholars define scat as a vocal improvisation using phonetic sounds similar to the instrumental sounds of jazz. Several Jazz guitar improvisers often include scat singing in live performances, phonetically imitating their instrumental sounds. However, this combination still maintains its challenges and difficulty with the impromptu exploitation of the vocal register producing a wide range of sounds simultaneously with the articulation and tone of the guitar. In this presentation, we propose a self-emulation online demonstration video that juxtaposes scatting with the guitar as a combination, extending the possibilities of timbre and articulation in an actual setting. The design is to accommodate musicians and guitarists with the submission of visual recordings. A live performance video snippet provides complex and straightforward examples of improvised melody, rhythm, syllables and pitch register, voice, and guitar, which drives the resulting instrument and vocal sound. Results show through post-test observation of the accuracy and fluency of both vocal scat and guitar improvisation to measure the effectiveness and available musical options. Findings have shown that audio and visual examples of the melodic range, rhythmic intensity, articulation, and phrasing through a live performance prove to be an effective outcome. It provides a more accurate observation and auditory enhancement and, more distinctively a life-long learning material for future musicians.



Objective

A self-emulation online demonstration video that aims to juxtapose scatting with the guitar as a combination, extending the possibilities of timbre and articulation in a real setting.

Advantages

It is designed to accommodate musicians and guitarists with the submission of visual recordings of musical examples.

Usefulness

A live performance video snippet with simple and complex examples of improvised melody, rhythm, syllables and pitch register, voice and guitar, which drives the resulting instrument and vocal sound.

Commercialisation Potential

- An online module for jazz guitar scat lessons and tutorials.
- A life-long learning and sustainability product material for future musicians.

Novelty

Audio and visual examples of the melodic range, rhythmic intensity, articulation, and phrasing through a live performance provide a more accurate observation and auditory enhancement and, more distinctively, life-long learning material for future musicians.



Infographic: Easy and Fun Learning in a New Norm (OBM340)

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Abstract

The COVID-19 outbreak has forced many local and private universities in Malaysia to immediately switch to the online delivery of teaching and learning. Students need to adapt to online lessons in a very short period and it became very stressful and difficult. Therefore, there is a need to make sure the lessons can be conveyed conveniently and at their pace without neglecting their constraints such as internet capabilities and coverage, the ability to adapt with fully online learning, their remote location, lacking facilities and others. This innovation describes how the innovators addressed this matter by transforming conventional online teaching into more interactive and interesting online classes. Universiti Teknologi MARA had imposed the Online Distance Learning (ODL) since the pandemic COVID-19 had occurred in Malaysia. Rather than using a traditional PowerPoint slide as a teaching delivery method, the innovator converted that information into an attractive infographic and highlighted the main topic during an online class. Infographic: Easy and Fun Learning in a New Norm (OBM340) is a new approach being applied for graduating students (semester 5) from Diploma in Office Management and Technology in UiTM Cawangan Kelantan Kampus Machang. The main objective is to increase students' level of understanding in their subjects, reduce students' pressure while facing difficulty during ODL, decrease boredom and monotony during teaching and learning and finally the goal is to make teaching and learning more fun and entertaining. The result showed that students participate attentively and have a better understanding of topics discussed. Students agreed that they can easily understand the given information when the information is presented in form of an infographic. The novelty of this product is that it is a new educational tool used for this subject in a new norm. Moreover, it helps the students to gain knowledge easier and at their convenient time.

Keywords: easy and fun learning, education, infographic, education tool

Infographic: Easy and Fun Learning in a New Norm (OBM340)

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



ABSTRACT

The COVID-19 outbreak has forced many local and private universities in Malaysia to immediately switch to the online delivery of teaching and learning. Students need to adapt to online lessons in a very short period and it became very stressful and difficult. Therefore, there is a need to make sure the lessons can be conveyed conveniently and at their pace without neglecting their constraint such as internet capabilities and coverage, the ability to adapt with fully online learning, their remote location, lacking facilities and others. This innovation describes how the innovators addressed this matter by transforming the conventional online teaching into more interactive and interesting online class. Universiti Teknologi MARA had imposed the Online Distance Learning (ODL) since the pandemic COVID-19 had occurred in Malaysia. Rather than using a traditional power point slide as teaching delivery method, the innovator converted that information into an attractive infographic and highlighting a main topic during online class. Infographic: Easy and Fun Learning in a New Norm (OBM340) is a new approach being applied for graduating students (semester 5) from Diploma in Office Management and Technology in UiTM Cawangan Kelantan Kampus Machang. The main objective is to increase student's level of understanding in their subjects, reduce student's pressure while facing a difficulty during ODL, decrease boredom and monotony during teaching and learning and finally the goal is to make the teaching and learning more fun and entertaining. The result showed that students participate attentively and have better understanding of topics discussed. Students agreed that they can easily understand the given information when the information is presented in form of infographic. The novelty of this product is that it is a new educational tool used for this subject in a new norm. Moreover, it helps the students to gain the knowledge easier and at their convenient time.

1.0 OBJECTIVES

- To increase student's level of understanding
- Reduce student's pressure in facing a difficulty during ODL
- To decrease boredom and monotony during teaching and learning
- To make the teaching and learning more fun and entertaining

3.0 USEFULNESS

- Benefit for graduating students (semester 5) from Diploma in Office Management & Technology program (BA118) in UiTM Cawangan Kelantan Kampus Machang and enrolled for OBM340 subject
- May useful to other students from other campus from the similar program (BA118)(Melaka, Jengka, Kedah, **Dungun and Sarawak Campus**)

2.0 ADVANTAGES

- Improve student's level of understanding in a constraint situation and new norm of learning
- State-of-art-encourage digital competence
- Convenient
- No cost
- Easy-accessible
- Improve the quality of teaching and learning among academicians and students

4.0 NOVELTY

- First time being introduced since 2019 until recent year as it is being used started from Online Distance Learning (ODL) being implemented in UiTM academic calendar
- Therefore, it is guaranteed that there is no duplication or similarity with the others

5.0 COMMERCIALIZATION POTENTIAL

- No commercialization since it is used for teaching and learning.
- However, there is a possibility for the sharing and knowledge expansion with the use of this idea.

6.0 INVENTORS



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Spaced Repetition: Bringing Learning Experience to the Galaxy

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Abstract

Internet Muamalat Learning (i-MULa) is a virtual education product introduced by lecturers from UiTM Sarawak for the use of students majoring in economics, banking, muamalat and Islamic management. The I-MULa application product has been introduced and developed as a necessary outcome in teaching and learning to students majoring in Islamic economics and banking (muamalat) at UiTM while conducting movement (MCO), created by the Covid-19 outbreak. Named as 'Internet Muamalat Learning (i-MULa)' because this product can be accessed through the Google Play store using a smartphone and can be accessed on any internet medium. The term 'learning' is used in this product to describe information related to muamalat learning that can be accessed, understood and learned only through mobile applications. This product consists of the introduction and definition of muamalat contracts, modus operandi in the muamalat system, sentences and propositions (Dalil) related to muamalat law and training and games based on muamalat learning. The product also provides the correct pronunciation method for each muamalat contract which consists of Arabic pronunciation. The use of this product can be targeted at all higher education students in the fields of economics, finance, business, banking and muamalat and this product is also suitable for use by employees who are directly involved in sectors such as Islamic banking, takaful and capital markets. This product was first introduced and used by students from November 2020 and was updated in August 2021 to version 2.0 to meet the learning and development needs of the Islamic financial sector. This product has great potential to be featured in the field of Education and used for the financial sector as a medium to provide information to the public about muamalat.

Keywords: Spaced Repetition, paediatric conditions, digital applications, technique

Spaced Repetition: Bringing Learning Experience to the Galaxy

TEACHING AND LEARNING **POSTER IDEAS** (TALPI) 2021

SPACED REPETITION: BRUNGING LEARNING



1.0 OBJECTIVES

This project is an application which Spaced repetition is called "Spaced Repetition 101". introduces project The combination of spaced repetition technique within digital application to gather and review learning materials in subject of occupational therapy in paediatric conditions.

2.0 ADVANTAGES

extremely is effective in improving long-term memory recall compared to other methods such as rote learning and cramming prior to exams.



There significant was а improvement level of on understanding about the technique and paediatric condition. It is about 60% of the respondents displayed having very good knowledge after using the app. More than 80% respondents answered quiz correctly after applying spaced repetition technique



This app helps the students to memorize paediatric many conditions to be a successful healthcare worker. For the time being, this app is free for anyone and only takes tiny space to be installed on mobile phone, tablet or laptop.

5.0 COMMERCIALISATION POTENTIAL

benefits This app has vast and commercialisation potential for learners especially for students of occupational therapy or health sciences program.

6.0 INVENTORS

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TALPI

Reducing Cultural Differences Between Malaysia and Japan Through Summer School Survival Guide

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Abstract

Japan and Malaysia are two countries that vary in terms of geography, history and demography. Therefore, there would be differences between the Malaysian culture and the Japanese culture in terms of beliefs, language, clothing, food and many more. For Japanese students who come to Malaysia for the first time, coping and adjusting to the Malaysian culture has always been a challenge. Adjusting to the local culture and minimizing the language barriers when visiting a new country could potentially help visitors to communicate effectively with the locals. Hence, this innovative product aims to reduce the cultural differences between Malaysia and Japan particularly among Japanese students visiting Malaysia to participate in summer school programs. In this Summer School Survival Guide, essential information covering various aspects of traveling to Malaysia is included in the hope to reduce cultural differences between the two countries. The innovativeness of this guide lies in the description of similar cultures shared by the two countries including common and useful language expressions that potentially able to reduce the anxiety of traveling to a foreign land. This guide is also useful to be utilized for purposes other than summer school programs. Thus far, the guide has been successful in accommodating Japanese students throughout their summer school experience in Malaysia, leading to repeated visits by Japanese visitors to Malaysia.

Keywords: Japan, Malaysia, School Survival Guide, cultural differences

Reducing Cultural Differences Between Malaysia and Japan Through Summer School Survival Guide



Meningkatkan Penguasaan Membina Ayat Dengan Kaedah Padang Bola Okabeka

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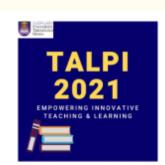
Abstract

Inovasi yang dihasilkan ialah 'Membina Ayat Dengan Menggunakan Teknik Padang Bola OKABEKA'. Objektif teknik padang bola OKABEKA ini ialah murid boleh mencungkil kemahiran berfikir (Kognitif) untuk membina pelbagai jenis ayat dengan mudah, cepat dan tanpa membazirkan masa berpandukan gambar atau tanpa gambar. Teknik padang bola OKABEKA ini yang mempunyai pelbagai unsur iaitu kemahiran berfikir ,pendekatan permaianan, konkrit kepada abstrak, mudah kepada kompleks. Teknik OPBKA merujuk kepada O -ORANG, KA -KATA KERJA B – BENDA KA – KATA ADJEKTIF .Inovasi ini boleh digunakan oleh murid Sekolah Kebangsaan (SK), Sekolah Jenis Kebangsaan (SJK) Cina dan Sekolah Jenis Kebangsaan (SJK) Tamil. Teknik OKABEKA ini juga bertujuan membantu murid yang sangat lemah dalam penulisan iaitu kertas 2 sama ada dalam Bina ayat, Ulasan atau Karangan. Selain itu, inovasi ini juga boleh dimanfaatkan oleh murid Sekolah Menengah (SM) yang masih lemah dalam bina ayat dan pelajar-pelajar asing sama ada dari Institut Pendidikan Tinggi Awam (IPTA) mahu pun Institut Pendidikan Tinggi Swasta (IPTS) dan murid-murid yang mengambil Bahasa Malaysia sebagai Bahasa kedua di Universiti tempatan. Teknik Padang Bola OKABEKA ini berjaya dilaksanakan dan murid-murid mendapat markah yang memberangsangkan dalam kalangan murid.Murid-murid terhibur hati dan boleh melihat perubahan tingkahlaku (TEORI BEHAVIORISME) dalam kalangan murid yang dan sentiasa menunjukkan muka ceria dan berhadapan untuk menjawab.Teknik OKABEKA ini juga meningkatkan lagi skor markah murid dalam menjawab soalan Penulisan (Kertas 2 - Bahasa Malaysia).

Kata Kunci: OKABEKA, teori behavarisme, kognitif, konkrit kepada abstrak

Meningkatkan Penguasaan Membina Ayat Dengan Kaedah Padang Bola Okabeka





Inovasi yang dihasilkan ialah 'Membina Ayat Dengan Menggunakan Teknik Padang Bola OKABEKA'. Melalui inovasi yang diperkenalkan ini, pelbagai jenis ayat boleh dibina oleh murid. Objektif teknik padang bola OKABEKA ini ialah murid boleh mencungkil kemahiran berfikir(Kognitif) untuk membina pelbagai jenis ayat dengan mudah, cepat dan tanpa membazirkan masa berpandukan gambar atau tanpa gambar .Murid juga boleh menulis ayat,karangan dengan struktur ayat yang betul dengan menggunakan teknik padang bola OKABEKA ini yang mempunyai pelbagai unsur iaitu kemahiran berfikir,pendekatan permaianan,konkrit kepada abstrak,mudah kepada kompleks. Teknik OPBKA merujuk kepada O -ORANG ,KA - KATA KERJA B - BENDA KA - KATA ADJEKTIF. Inovasi ini boleh digunakan oleh murid Sekolah Kebangsaan (SK), Sekolah Jenis Kebangsaan (SJK) Cina dan Sekolah Jenis Kebangsaan (SJK) Tamil.Dengan menggunakan TEKNIK PERMAINAN OKABEKA ini,murid-murid dapat membina ayat mengikut struktur ayat dan gramatis yang betul.Murid yang tidak tahu menulis ayat berpandukan gambar pasti boleh menulis ayat dengan baik dengan menggunakan struktur ayat yang lengkap. Teknik OKABEKA ini juga bertujuan membantu murid yang sangat lemah dalam penulisan iaitu kertas 2 sama ada dalam Bina ayat, Ulasan atau Karangan. Selain itu, inovasi ini juga boleh dimanfaatkan oleh murid Sekolah Menengah (SM) yang masih lemah dalam bina ayat dan pelajar-pelajar asing sama ada dari Institut Pendidikan Tinggi Awam (IPTA) mahu pun Institut Pendidikan Tinggi Swasta (IPTS) dan murid-murid yang mengambil Bahasa Malaysia sebagai Bahasa kedua di Universiti tempatan bagi boleh membina ayat dalam Bahasa Melayu dengan cara yang berkesan. Terdapat beberapa masalah yang dihadapi oleh kumpulan sebelum memulakan inovasi ini.Mula-mula,murid-murid tidak mempunayai masa yang mencukupi untuk mengumpul data dan maklumat yang diperlukan. Kedua, murid-murid juga menghadapi kesukaran untuk bertemu dan berbincang dengan rakan-rakan sekumpulan tentang teknik OKABEKA ini. Inovasi atau Teknik OKABEKA ini sangt berkesan kepada semua murid yang menghadapi kesukaran untuk menulis sebauh ayat yang lengkap. Murid dapat menulis ayat bergramatis yang betul sama ada di dalam ujian atau peperiksaan dan buku latihan. Mereka boleh berfikir secara kritis untuk menulis ayat dengan betul. Teknik Padang Bola OKABEKA ini berjaya dilaksanakan dan murid-murid mendapat markah yang memberangsangkan dalam kalangan murid.Murid-murid terhibur hati dan boleh melihat perubahan tingkahlaku (TEORI BEHAVIORISME) dalam kalangan murid yang dan sentiasa menunjukkan muka ceria dan berhadapan untuk menjawab. Teknik OKABEKA ini juga meningkatkan lagi skor markah murid dalam menjawab soalan Penulisan dan mampu meluluskan murid-murid yang sangat lemah dan tidak pernah lulus dalam kertas 2. Kata kunci : OKABEKA, teori behavarisme, Kognitif , konkrit kepada abstrak.

1.0 OBJEKTIF

Antara objektif rekaan inovatif padang bola OKABEKA adalah :

- 1.menarik minat murid untuk mengikut pembelajaran membina dan menulis ayat.
- 2.Meningkatkan peratus murid menguasai kemahiran membina dan menulis ayat.
- 3.Meningkatkan keyakinan diri dalam kalangan murid untuk membina ayat yang lebih baik dan sistematik.
- 4.Meningkatkan fungsi guru sebagai pemudahcara.

2.0 KEBAIKAN

Melalui pemerhatian yang dijalankan,murid-murid teruja untuk melakukan aktiviti pembelajaran menggunakan Padang Bola OKABEKA .Murid-murid juga berlumba-lumba membina ayat yang lebih bayak untuk mendapatkan mata ganjaran.Murid juga berjaya melakukan cabaran 20 ayat semasa pembelajaran di dalam kelas.Penggunaan Pdang Bola Sepak OKABEKA telah meningkatkan keyakinan diri dalam kalangan murid dan menjadikan murid lebih proaktif serta berdaya saing.Guru-guru tidak berasa tertekan untuk mengendalikan aktiviti pengajaran ini kerana murid boleh melakukan aktiviti pembelajaran pada bola sepak OKABEKA secara kendiri dalam kumpulan atau individu.Selain itu,inovasi ini dapat mewujudkan suasana pembelajaran yang seronok dan berkesan.Inovasi ini memberi impak yang positif dan berkesan kepada semua murid.Berteraskan hasil ujian pos,membuktikan bahan inovasi ini mampu meningkatkan keg-fahaman murid untuk membinan dan menulis ayat dengan betul dalam suasana pembelajaran yang ceria.Selain itu,murid juga dapat membina dan menulis ayat yang betul.Inovasi ini dapat mengatasi masalah bina ayat dalam kalangan murid dan memudahkan mereka untuk mencapai kemahiran menulis.

3.0 PENGGUNAAN

Dengan Padang bola OKABEKA INI murid major membina ayat dengan betul dan sempurna.Permainan padang bola OKABEKA ini juga menarik perhatian murid untuk mengambil bahagian dalam aktiviti kumpulan dengan aktif.Murid juga dapat menulis ayat,karangan atau ulasan dengan berdikari tanpa bantuan sesiapa.Aktiviti Padang bola OKABEKA ini juga membantu murid-murid untuk mendapatkan markah yang cemerlang dalam peperiksaan.

4.0 KEBAHARUAN

Aktiviti PADANG BOLA OKABEKA ini Sangat menarik untuk golongan murid yang Lenah dalam pembinaan ayat.Selain menarik perhatian murid-murid,Mereka juga dapat memahami Cara menulis ayat dengan betul.TEKNIK OKABEKA ini juga sangat senang untuk memahami dan mengikuti.Oleh itu, murid-murid lain juga senang memahami konsep OKABEKA inmi sambal bermain permainan ini.

5.0 COMMERCIALISATION POTENTIAL

PADANG BOLA OKABEKA ini merupakan satu aktiviti yang boleh meningkatkan Kemahiran menulis Jika produk ini dijual.Murid yang membeli produk ini bukan sahaja menulis tetapi mereka boleh bermain sambil menulis.Produk ini juga,membantu pembeli untuk mengikuti langkah-langkah yang senang untuk meningkatkan Kemahiran menulis.Produk Padang Bola OKABEKA ini juga berwarna-warni dan Mamou MENARIK perhatian pembeli.

Smart Notes for Musculoskeletal: A Mobile Application

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Abstract

The pandemic virus Covid-19 has resulted in a restriction for conventional face-to-the face teaching and learning sessions throughout the world. As a result, most academic institutions are urged to apply Open Distance Learning (ODL) through extensive usage of technology. However, a major curb for technology is the complexity of information delivery and poor internet connection especially for students living in rural areas. Thus, the creation of mobile applications may aid in the development of an alternative technology platform that can help to streamline teaching and learning sessions. Agile framework methodology was employed for the development of the mobile application. The existing hard copy course material was digitally transformed and incorporated into the app spreadsheet and linked to the associated folder. For simplicity of access and increased visibility to the user, the course content was organized according to the lesson plan. Colorful graphics help promote effective communication and maximize its usability henceforward a brief explanation of each course's material will give a quick understanding of the lesson plan's objectives. The beta version of the mobile application has been demonstrated to be user-friendly, with an appealing graphic interface, low data consumption, integrated learning course material, and a low development cost. The creation of the mobile application for education purposes helps in maximization of usability and availability to healthcare students particularly those who live in remote areas with restricted internet access. Investors, educators, academicians, and students alike will be drawn to an educationfocused mobile application that provides ease of use, minimal data usage, and affordable development costs. The strength of the applications is a user-friendly mobile application platform with a beautiful graphic interface, minimal data consumption, integrated learning course material, inexpensive development costs, and access to all members of academic institutes.

Keywords: Musculoskeletal, Smart Notes, Mobile Application

Smart Notes for Musculoskeletal: A Mobile Application

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



ABSTRACT

1.0 INTRODUCTION & OBJECTIVES

The pandemic virus Covid-19 has resulted a restriction for conventional face to the face teaching and learning sessions throughout the world. As a result, most academic institutions are urged to apply Open Distance Learning (ODL) through extensive usage of technology. However, a major curb for technology is the complexity of information delivery and poor internet connection especially for students living in the rural areas. Thus, the creation of mobile applications may aid in the development of an alternative technology platform that can help to streamline teaching and learning sessions.

3.0 USEFULNESS & PRACTICALITY

The–creation of a mobile application for education purpose helps in maximisation of usability and availability to healthcare students particularly those who live in remote areas with restricted internet access.

6.0 INVENTORS

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2.0 ADVANTAGES

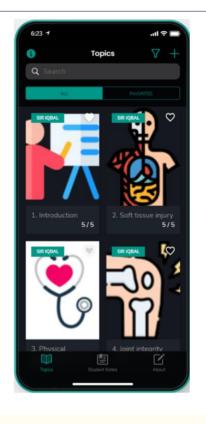
The beta version of the mobile application has demonstrated to be user-friendly, with an appealing graphic interface, low data consumption, integrated learning course material, and a low development cost.

4.0 NOVELTY

A user-friendly mobile application platform with a beautiful graphic interface, minimal data consumption, integrated learning course material, inexpensive development costs, and access to all members of academic institutes.

5.0 COMMERCIALISATION POTENTIAL

Investors, educators, academicians, and students alike will be drawn to an education-focused mobile application that provides ease of use, minimal data usage, and affordable development costs.





Quick Response Code in Teaching and Learning Activity

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Abstract

Interactive teaching and learning in the classroom will continuously motivate students to engage in classroom activities. Previous researchers discussed various approaches to identify the most effective teaching approach that matches millennial students. With today's industry changes, educators must be well prepared to explore technology and digital tools in the classroom. In this study, students registered in the restaurant operations course were required to complete a group assessment. A part of the topics covered in this course was concept identification, restaurant design and restaurant operations layout. The educator introduced the use of the quick response (QR) code as one of the classroom tools to encourage students' involvement in the learning activities. Group representatives scanned the code to get the information about the restaurant concept. Then, group discussion was actively encouraged to explore and get more information related to the restaurant concepts. This activity indirectly increased students' creativity and communication skills, information and media literacy that align with 21st-century skills.

Keywords: Quick Response Code, classroom tools, learning

Quick Response Code in Teaching and Learning Activity

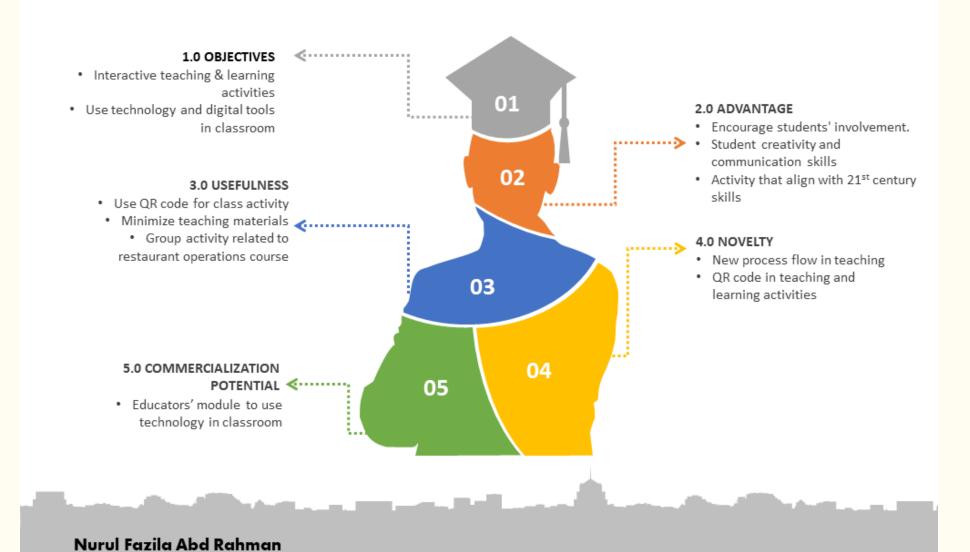




ABSTRACT

Kolej Komuniti Sungai Petani, Kedah

Interactive teaching and learning in the classroom will continuously motivate students to engage in classroom activities. Previous researchers discussed various approaches to identify the most effective teaching approach that matches millennial students. With today's industry changes, educators must be well prepared to explore technology and digital tools in the classroom. In this study, students registered in the restaurant operations course were required to complete a group assessment. A part of the topics covered in this course was concept identification, restaurant design and restaurant operations layout. The educator introduced the use of the quick response (QR) code as one of the classroom tools to encourage students' involvement in the learning activities. Group representatives scanned the code to get the information about the restaurant concept. Then, group discussion was actively encouraged to explore and get more information related to the restaurant concepts. This activity indirectly increased students' creativity and communication skills, information and media literacy that align with 21st-century skills.



RakanBM: Malay Language Mobile and Augmented Reality-based Application for Foreign Learners

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Abstract

Teaching and learning of Malay Language (ML) as a foreign language (FL) is actively conducted in local universities with the increase in international students' enrolment in this course. Apart from Malaysia, learning of the ML as an FL has also been introduced in several universities abroad, especially in East Asian countries. However, many teachers and students remarked that they face difficulty in obtaining ML T&L materials abroad to use as reference. Most of the available materials are in the form of books and are unsuitable for teaching pedagogy of ML as an FL. The lack of reference materials has made it difficult for foreign students to learn ML outside the classroom. Additionally, T&L of ML for foreign speakers will be more effective with practical experience in the field. However, the distant location makes it hard to do so. Therefore, ML learning material in the form of a mobile and augmented reality-based application named RakanBM was developed through research to enable a more interactive and engaging ML T&L experience. The study's main objective is to enrich ML T&L materials for foreign speakers, especially for beginners. The material contains eight situational themes: Vocal and Consonant System, Greeting Expressions, Numbers and Currencies, Time, Days, Directions, Food, and Let's Test Our Language, explained in the text, audio and video format in a smartphone application used as an ML T&L teaching aid. The video and audio application is capable of helping foreign students understand the ML well because of the integration of cultural elements. This application can be downloaded using Android or iOS devices. Several examples of language interaction using augmented reality applications were also developed to make the T&L experience authentic. It is hoped that this innovative product can develop the interest of foreigners to learn the ML.

Keywords: Malay Language, Augmented Reality-based Application, foreign learners

RakanBM: Malay Language Mobile and Augmented Reality-based **Application for Foreign Learners**



TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



ABSTRACT

The field of Malay language (ML) as a Foreign Language (FL) is increasingly gaining ground both locally and abroad. However, many foreign students still have to contend with the lack of learning materials in the ML as a foreign language, especially for students who are overseas. Therefore, a mobile application and augmented reality-based learning material named RakanBM was developed. The content of this application includes:

- > Eight situational themes (Cultural application is also featured)
- Content presented in text, audio, and video format
- Can be downloaded using Android or iOS device
- Augmented reality application is also provided for some chapters







OBJECTIVES

IDENTIFICATION

- 1.Universiti Kebangsaan Malaysia (UKM)
- 2. Tokyo University of Foreign Studies (TUFS)
- 3. Hankuk University of Foreign Studies (HUFS)
- 4. Feng Chia University (FCU) Taiwan 5.Beijing Foreign Studies University

Based on the research findings, the ML language as a FL class lacks:

- Communication materials
- Cultural elements
- Examples of native speaker pronunciation
- Exercises

(BFSU)

This newly invented product therefore aims to solve the problems mentioned above

COMMERCIALIZATION **POTENTIAL**

CONVENTIONAL METHOD

TECHNOLOGICAL APPROACH (RakanBM)

AVAILABLE TOPICS IN THE APPS:

- √Vocal and Consonant System
- √ Greetings Expression
- ✓ Numbers and Currencies (AR)
- ✓Time (AR)
- ✓ Days
- ✓ Directions
- √Food
- ✓ Let's Test Our Language (AR)

Covers most of the basic topics in ML as FL

ADVANTAGES

NATIVE SPEAKER'S VOICE







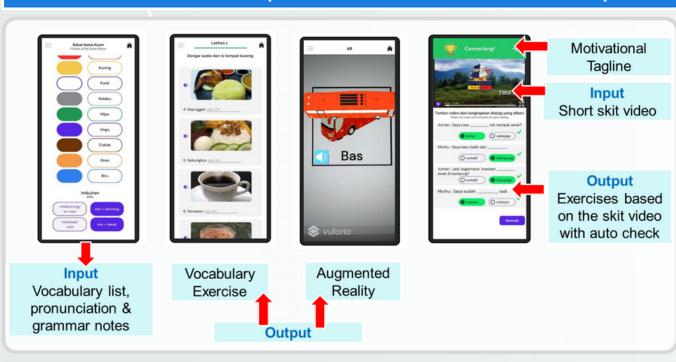
Vocabulary Grammar

Notes Exercise

Situational **Topics** Malaysian **Customs**

USEFULNESS

NOVELTY (CONTEXTUAL REALIZATION)



Students

- Content can be replayed repeatedly
- Cultural elements integrated in the skit video
- A variety of exercises
- Runs on iOS and Android platform

Teacher

- Easy access to teaching materials
- Able to extend teaching session beyond classroom hours
- Able to check on student's progress

INVENTORS:

Prof. Dr. Nor Hashimah Jalaluddin, Dr. Lam Meng Chun, Dr. Nazatul Aini Abd Majid, Dr. Junaini Kasdan, Pn. Aznur Aisyah Abdullah, En. Azlan Ahmad, En. Daing Zairi Ma'arof, Dr. Affifuddin Husairi, Cik Nur Asylah Suwadi, Prof. Dr. Haslina Arshad





VAKSaya: Gaya Pembelajaran Saya

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Abstrak

Pemerkasaan Minda Menuju Kejayaan Asas merupakan salah satu kursus kokurikulum di mana kursus kokurikulum merupakan kursus wajib universiti bertujuan untuk mengukuhkan sahsiah pelajar. Pemerkasaan Minda Menuju Kejayaan Asas atau HPD140 mula diperkenalkan sebagai kursus kokurikulum berkredit di Universiti Teknologi MARA (UiTM) Shah Alam pada sesi akademik Mac 2019 di bawah teras kepimpinan. Antara matlamat kursus adalah untuk melahirkan mahasiswa yang memandu minda kearah yang lebih kreatif, innovatif, mampan dan berdaya saing. Selain melahirkan mahasiswa dengan minda kelas pertama. Oleh itu, kecemerlangan diri adalah bermula daripada diri pelajar sendiri. Sebagai seorang pelajar, Pemerkasaan Minda Menuju Kejayaan Asas merupakan salah satu kursus kokurikulum yang sesuai dapat meningkatkan serta mengembangkan lagi bakat dan potensi dalaman pelajar. Terdapat tujuh topik utama yang diajar dan salah satu topik adalah berkaitan dengan kenali diri. Pelajar mempelajari apakah sistem representasi diri samada visual, auditori dan kinestetik (VAK) serta ciri-ciri sensori tersebut. Soalan berkaitan sistem representasi diri disediakan dalam bentuk borang dan diedarkan kepada pelajar semasa kelas. Proses ini memerlukan masa yang lama dan kadang-kadang terdapat ketidaktepatan maklumat yang diberikan oleh pelajar. Bagi menentukan markah VAK, pelajar perlu mengiranya secara manual. Dengan menggunakan teknologi digital, borang ini telah melalui proses inovasi dan transformasi penambahbaikan yang tersendiri dan kini menggunakan sistem yang dinamakan VAKSaya: Gaya Pembelajaran Saya (MyVAK:My Learning Styles). Ianya dibangunkan menggunakan HTML PHP dan pengkalan data MySQL. Terdapat 10 soalan yang diajukan berdasarkan tiga deria iaitu mata (visual), telinga (auditori), dan rasa (kinestetik). Melalui sistem ini, pelajar perlu mengisi markah dengan skala 3 untuk yang paling relevan; 2 untuk yang relevan dan 1 untuk yang kurang relevan. Uniknya sistem ini, markah tertinggi dan terendah pelajar dikira secara automatik mengikut sensori VAK pelajar. Dengan menggunakan sistem VAKSaya, pensyarah dapat memberikan penjelasan dengan terperinci mengenai gaya pembelajaran pelajar berbanding sebelum ini. Dari hasil yang diperolehi, sistem ini berfungsi dengan baik, effisien, sistematik dan boleh dipercayai.

Kata Kunci: VAKSaya, gaya pembelajaran, pelajar

VAKSaya:Gaya Pembelajaran Saya



MAHANIJAH MD KAMAL^{1,2}

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 Pusat Kokurikulum, Bahagian Hal Ehwal Pelajar, Universiti Teknologi MARA,
 40450 Shah Alam Selangor



ABSTRAK

Pemerkasaan Minda Menuju Kejayaan Asas merupakan salah satu kursus kokurikulum berkredit di mana kursus kokurikulum merupakan kursus wajib universiti bertujuan untuk mengukuhkan sahsiah pelajar. Pemerkasaan Minda Menuju Kejayaan Asas atau HPD140 mula diperkenalkan sebagai kursus kokurikulum berkredit di Universiti Teknologi MARA (UiTM) Shah Alam pada sesi akademik Mac 2019 di bawah teras kepimpinan. Antara matlamat kursus adalah untuk melahirkan mahasiswa yang memandu minda kearah yang lebih kreatif, innovatif, mampan dan berdaya saing. Selain melahirkan mahasiswa dengan minda kelas pertama. Oleh itu, kecemerlangan diri adalah bermula daripada diri pelajar sendiri. Sebagai seorang pelajar, cara pembelajaran yang sesuai dapat meningkatkan serta mengembangkan lagi bakat dan potensi dalaman pelajar. Terdapat tujuh topik utama yang diajar dan salah satu topik adalah berkaitan dengan kenali diri. Pelajar mempelajari apakah sistem representasi diri samada visual, auditori dan kinestetik (VAK) serta ciri-ciri sensori tersebut. Soalan berkaitan sistem representasi diri disediakan dalam bentuk borang dan diedarkan kepada pelajar semasa kelas. Proses ini memerlukan masa yang lama dan kadang-kadang terdapat ketidaktepatan maklumat yang diberikan oleh pelajar. Bagi menentukan markah VAK, pelajar perlu mengiranya secara manual. Dengan menggunakan teknologi digital, borang ini telah melalui proses inovasi dan transformasi penambahbaikan yang tersendiri dan kini menggunakan sistem yang dinamakan VAKSaya: Gaya Pembelajaran Saya (MyVAK:My Learning Styles). lanya dibangunkan menggunakan HTML PHP dan pengkalan data MySQL. Terdapat 10 soalan yang diajukan berdasarkan tiga deria iaitu mata (visual), telinga (pendengaran), dan rasa (kinestetik). Melalui sistem ini, pelajar perlu mengisi markah dengan skala 3 untuk yang paling relevan; 2 untuk yang relevan dan 1 untuk yang kurang relevan. Uniknya sistem ini, markah tertinggi dan terendah pelajar dikira secara automatik mengikut sensori VAK pelajar. Dengan menggunakan sistem VAKSaya, pensyarah dapat memberikan penjelasan dengan terperinci mengenai gaya pembelajaran pelajar berbanding sebelum ini. Dari hasil yang diperolehi, sistem ini berfungsi dengan baik, effisien, sistematik dan boleh dipercayai.

PENGENALAN

- □ Topik Kenali Diri merupakan salah satu topik yang diajar bagi Kursus Kokurikulum Berkredit Pemerkasaan Minda Menuju Kejayan Asas (HPD140).
- Antara kandungannya adalah mengenali ciri-ciri sensori pelajar samada visual, pendengaran atau kinestetik bagi tujuan membantu gaya pembelajaran yang bersesuaian dengan pelajar.
- □ Borang Sistem Representasi Diri diedarkan semasa kelas.

OBJEKTIF

- Membantu pensyarah mengenalpasti VAK pelajar dengan menggunakan sistem penilaian dalam talian melalui penggunaan peralatan seperti telefon atau komputer.
- Menjana markah VAK pelajar secara automatik dan pantas.
 Mengenalpasti gaya pembelajaran pelajar yang bersesuaian merujuk kepada sensori dominan pelajar.

POTENSI KOMERSIAL

- □ Sistem ini mesra pelanggan, effisien dan soalan bagi kategori VAK adalah dalam Bahasa Malaysia.
- ☐ Sistem ini boleh diakses dan menampung bilangan penggunaan melebihi 100 pelajar.

PENYATAAN MASALAH

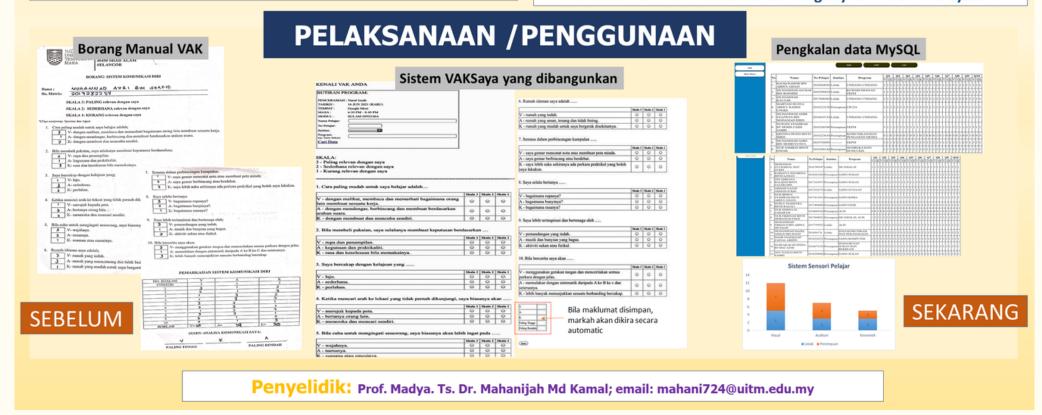
Sebelum ini, borang soalan berkaitan VAK diedarkan kepada pelajar untuk diisi dan markah mereka dikira secara manual menggunakan borang yang diberikan. Proses in mengambil masa yang lama dan tidak mesra pelajar.Sekiranya bilangan pelajar kurang daripada 30, borang dapat diedarkan seterusnya penjelasan berkaitan gaya pembelajaran akan diterangkan. Tetapi sekiranya bilangan pelajar melebihi 30 pelajar, soalan akan dipaparkan untuk pelajar baca dan menjawabnya. Ini menyebabkan ketidaktepatan maklumat ketika pelajar menjawab soalan ini.

NOVELTI/KEUNIKAN

- ☐ Sistem ini boleh digunakan bukan hanya untuk kursus HPD140 tetapi juga kepada kursus-kursus yang lain kerana ianya berkaitan dengan gaya pembelajaran yang sesuai untuk pelajar.
- □ Kebanyakan platform sistem penilaian VAK yang berada dalam talian menggunakan soalan dalam Bahasa Inggeris dan tiada skala. Uniknya, system ini dirangka dalam Bahasa Malaysia dan mempunyai skala.

HARTA INTELEK

CRLY00026512 –Visual-auditory-kinesthetic Real Time Sensory Evaluation Of Uitm Students'learning Styles Via Online System



VIT-MS Virtual Industrial Training Management System

Nur Azrini Ramlee Nor Roslina Rosli Muzakkir M. Zainol Sitinoor Adeib Idris Suhaiza Hanim Hanipah Siti Wahidah Puasa

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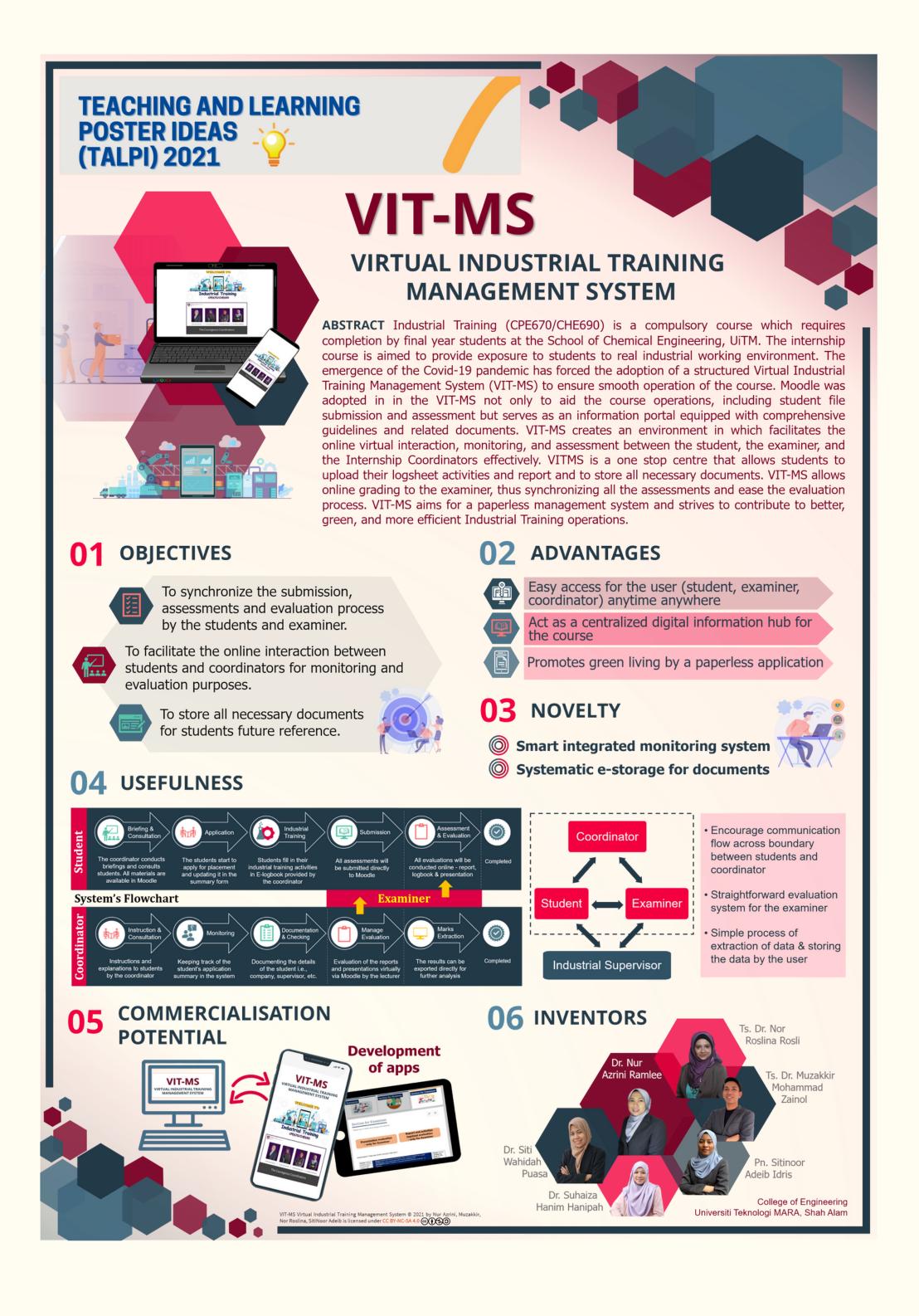
Emel: fkkinternship@uitm.edu.my

Abstract

Industrial Training (CPE670/CHE690) is a compulsory course that requires completion by final year students at the School of Chemical Engineering, UiTM. The internship course is aimed to provide exposure to students to real industrial working environments. The emergence of the Covid-19 pandemic has forced the adoption of a structured Virtual Industrial Training Management System (VIT-MS) to ensure the smooth operation of the course. Moodle was adopted in the VIT-MS not only to aid the course operations, including student file submission and assessment but serves as an information portal equipped with comprehensive guidelines and related documents. VIT-MS creates an environment in which facilitates the online virtual interaction, monitoring, and assessment between the student, the examiner, and the Internship coordinators effectively. VIT-MS is a one-stop centre that allows students to upload their logsheet activities and report and store all necessary documents. VIT-MS allows online grading to the examiner, thus synchronizing all the assessments and easing the evaluation process. VIT-MS aims for a paperless management system and strives to contribute to better, green, and more efficient Industrial Training operations. VIT-MS will stay relevant to be embedded in Internship Program Management to the post Covid-19.

Keywords: VIT-MS, industrial Training, internship course

VIT-MS Virtual Industrial Training Management System



JESTER 2.0

Nursyuhada Zakaria Nur Alyani Khairol Anuar Nurul Hijah Jasman Muhammad Irfan Mokhtar Nursuhaila Ibrahim

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Abstract

The challenge in understanding and learning English grammar has been a ceaseless issue for most L2 learners. This issue will lead to a general lack of competency since they have yet to learn the fundamentals. Hence, this card game was designed to assist students in efficiently learning English grammar while also reducing their anxiety associated with studying English. Jester 2.0 was roused by the idea of both Joker and Donkey card games. It is however has been refined to be a more challenging and engaging language game. There are 53 cards in all, with different pictures and descriptions on each one, as well as one 'You Are It!' card. The players must match the picture card to its description and construct a sentence using one of the card's adjectives. They must also avoid becoming the player who holds the 'You Are It!' card at the end of the game.

Keywords: Jester 2.0, L2 learners, grammar,

JESTER 2.0

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021





- NURSYUHADA ZAKARIA
- NUR ALYANI KHAIROL ANUAR
- NURUL HIJAH JASMAN MUHAMMAD IRFAN MOKHTAR
- NURSUHAILA IBRAHIM

BRONZE INTERNATIONAL TINKER AWARD INNOVATION &

ENTREPRENEURSHIP CHALLENGE (I-TIEC 2019)

BRONZE ASIA INTERNATIONAL INNOVATION EXHIBITION AWARD (AIINEX 2020)

ABSTRACT

Challenge in understanding and learning English grammar has been a ceaseless issue for most L2 learners. This issue will lead to a general lack of competency since they have yet to learn the fundamentals. Hence, this card game was designed to assist students in efficiently learning English grammar while also reducing their anxiety associated with studying English. Jester 2.0 was roused by the idea of both Joker and Donkey card games. It is however has been refined to be a more challenging and engaging language game. There are 53 cards in all, with different pictures and descriptions on each one, as well as one 'You Are It!' card. The players must match the picture card to its description and construct a sentence using one of the card's adjectives. They must also avoid becoming the player who holds the 'You Are It!' card at the end of the game.



OBJECTIVES

- To help students learn and apply the use of Adjectives
- To reduce the anxiety in learning English



NOVELTY

An edutainment card game that incorporates learning and entertainment simultaneously.

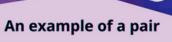
USEFULNESS

- A new way of learning English grammar through a card game
- Promotes collaborative learning among the players
- Suitable as a filler activity or an enrichment in ESL classrooms

POTENTIAL COMMERCIALIZATION

The game is suitable to be commercialized in the future because it is suitable to be played family members among The friends. game is also applicable to be played in a classroom setting or during parties.







Front & back view of the box

Praktis Tulisan JEPUN: Pelantar Pengajaran dan Pembelajaran Digital

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Abstrak

Bertitik tolak dari program Dasar Pandang ke Timur pada tahun 1980-an, kursus bahasa Jepun telah diperluaskan ke seluruh Malaysia. Namun begitu, dalam menghadapi dunia serba moden, pengajaran yang berlandaskan teknologi amat diperlukan dalam kursus bahasa Jepun pada masa kini. Namun begitu, pengajaran tulisan Jepun yang memerlukan pengajar melakar bentuk tulisan semasa menerangkan cara menulis tulisan Jepun kepada pelajar amat sukar dilakukan secara atas talian. Penggunaan tetikus bagi menunjukkan cara menulis juga tidak begitu praktikal. Sebilangan bahan pembelajaran digital yang terdapat di pasaran juga tidak memiliki penjelasan terperinci mengenai skrip bahasa Jepun seperti sejarah dan aplikasinya. Laman sesawang pembelajaran tulisan Jepun yang terdapat di internet juga kekurangan bahan tambahan seperti lembaran latihan, praktis mendengar, latihan membaca atau sebutan penutur asli Jepun juga tidak dilengkapi. Tambahan pula, kebanyakan bahan pembelajaran tulisan Jepun yang terdapat di atas talian hanya memperkenalkan huruf Kana (Hiragana dan Katakana) sahaja. Tiada segmen untuk latihan perbendaharaan kata bagi mempraktikkan huruf yang telah diperkenalkan. Oleh itu, satu penyelidikan telah dijalankan bagi menghasilkan inovasi yang dapat menjadi pemudah cara bagi tenaga pengajar dan juga pelajar. Inovasi ini melibatkan gabungan audio sebutan huruf dan cara menulis secara visual yang dapat dipapar semula berulang kali. Setiap segmen Sei-on dan senarai perkataan yang boleh dibentuk daripada huruf-huruf tersebut juga diperkenalkan dalam segmen kosa kata bergambar. Segmen ini direalisasikan dalam bentuk digital, diucapkan dan dijelaskan oleh penutur asli. Kaedah novel ini dapat meningkatkan kebarangkalian huruf atau kata yang dapat dipindahkan ke memori kekal. Semua konsep yang dikembangkan dalam bahan ini sesuai dengan konsep pembelajaran kognitif yang menekankan tahap pembelajaran dari tahap mudah hingga sukar. Produk Praktis Tulisan Jepun ini terdiri daripada dua medium iaitu buku teks dan laman sesawang. Diharapkan dengan adanya inovasi ini, pengajaran dan pembelajaran bahasa Jepun di alam maya bukan sahaja akan menjadi lebih dinamik tetapi juga lebih mudah

Kata Kunci: Tulisan JEPUN, praktis, buku teks,, sesawang

Praktis Tulisan JEPUN: Pelantar Pengajaran dan Pembelajaran Digital

PRAKTIS TULISAN JEPUN: PELANTAR PENGAJARAN DAN PEMBELAJARAN DIGITAL

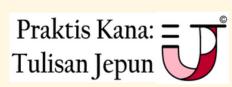


TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021

ABSTRAK

Pembelajaran bahasa Jepun sebagai bahasa asing di Malaysia telah lama dijalankan sejak termetrainya polisi Dasar Pandang ke Timur pada awal tahun 1980-an manakala Bahasa Jepun di Universiti Kebangsaan Malaysia (UKM) telah dimulakan seawal tahun 1975. Namun begitu, bahan pembelajaran bahasa Jepun masih kurang didapati di pasaran tempatan. Tambahan pula, bahan pengajaran mengenai tulisan Jepun yang boleh diakses secara virtual juga sukar untuk diperolehi. Oleh yang demikian, satu penyelidikan reka bentuk laman sesawang bagi menampung keperluan gaya pembelajaran alaf baharu ini telah dijalankan. Produk ini lebih mesra pengguna di mana:

- Cara menulis tulisan Jepun diterangkan dengan terperinci
- Sebutan penutur natif disediakan
- Latihan yang lebih komprehensif
- Kosa kata bahasa Jepun dipaparkan melalui satu gambar bersituasi



OBJEKTIF

Kajian pasaran:

Bahan pembelajaran tulisan BJ mempunyai kekurangan:

- x Dalam bentuk buku sahaja.
- x Cara menulis tidak diterangkan satu per satu
- x Sebutan penutur natif tidak disediakan.
- x Font Kursif digunakan pelajar keliru
- x Tiada bimbingan selepas kelas.

relevan bagi masa kini.

- Penggunaan BJ di dalam konteks tempatan
- x Bahagian latihan tidak mencukupi x Tidak sesuai untuk kelas secara virtual.

Reka bentuk bahan PdP BJ lebih kondusif dan

Tahun 2014 (Flash Programming)CD >>> Tahun 2021 (HTML Programming) laman sesawang

MANAFAAT

SUARA PENUTUR NATIF

AUDIO

SEBUTAN INTONASI

VISUAL

URUTAN TULISAN KOSAKATA BERGAMBAR

> LATIHAN **BUKU TEKS** わたし **DIGITAL**

Buku teks Dwibahasa

KELEBIHAN

Pelajar

- Cara tulis dan sebutan boleh diakses berulang kali.
- Pakej lengkap dengan buku teks.
- Ruangan latihan yang cukup.
- Pembelajaran kendiri
- Sesuai untuk latih tubi

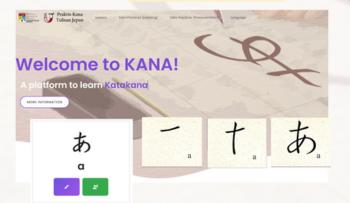
Pengajar

- Guru tidak perlukan papan putih atau melakar tulisan
- menggunakan tetikus komputer Pengajaran berjalan dengan lebih pantas.
- Boleh mempamerkan sebutan penutur natif yang sebenar.
- Pelbagai latihan dapat membantu pelajar.

PEREKACIPTA: AZNUR AISYAH ABDULLAH, NORMALIS AMZAH, MOHAMED ZAIN SULAIMAN, LAM MENG CHUN

NOVELTI

Laman Sesawang HTML



Tulisan Jepun Sebutan & Cara tulis



Kosa kata BJ Sebutan & Penggunaan kosa kata

POTENSI KOMERSIALAN

Produk dalam bentuk laman sesawang. Tidak perlu memuat turun Mesra pengguna

Versi 1.0 telah dicetak hampir 2000 unit.

Sekolah Rendah dan Menengah Institusi Pendidikan Tinggi Pegawai Diplomat Program kursus dan latihan syarikat Jepun

Pelaburan oleh Syarikat Pelangi Sdn Bhd. Tajaan Dana Inovasi UKM

UKM.IKB.800-4/1/3623

Let's Travel The World: Travel and Street Photography Course

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Abstract

This course is designed for students to understand how to arrive at a new location with appropriate gear, attitude and completed research. They will be able to assess what they want to photograph, why they want to photograph and what they think they might like to do with the photographs. Possibilities include pitching a travel story to online or print media. The skills you will learn apply not only to travel photography but to all kinds of photography. The fundamentals are all the same, and we will give you tips on how to take photos in just about any setting or situation. This course will teach you everything you need to know about photography – regardless of your experience level or device – so you can take the pictures you've always wanted! It takes a step-by-step approach to help you improve your photography and is packed with examples, images and videos, making what can seem like a complex subject easy to understand. In the end, students can identify the difference between travel photography and street photography and its relationship, organize the subject to photograph via destination research with proper types of equipment and travel ethics and justify the opportunities in travel and street photography by producing content based on travel experiences.

Keywords: photograph, travel, street, new location

Let's Travel The World: Travel and Street Photography Course

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021

INVENTORS:

NIK NOR AZIDAH NIK AZIZ (LEADER) INDA MURNI HAIRUL ANUAR MOHD SHARIFUL HAFIZAL AMINUDDIN FADLI ABDUL RAZAK NUR AKMA HALILI

Faculty of Art & Design, UiTM nikazidah@uitm.edu.my

LET'S TRAVEL THE WORLD:

TRAVEL AND STREET PHOTOGRAPHY COURSE

ABSTRACT

This course is designed for students to understand how to arrive at a new location with appropriate gear, attitude and completed research. They will be able to assess what they want to photograph, why they want to photograph and what they think they might like to do with the photographs. Possibilities include pitching a travel story to online or print media. The skills you will learn apply not only to travel photography but to all kinds of photography. The fundamentals are all the same, and we will give you tips on how to take photos in just about any setting or situation. This course will teach you everything you need to know about photography – regardless of your experience level or device – so you can take the pictures you've always wanted! It takes a step-by-step approach to help you improve your photography and is packed with examples, images and videos, making what can seem like a complex subject easy to understand. In the end, students can identify the difference between travel photography and street photography and its relationship, organise the subject to photograph via destination research with proper types of equipment and travel ethics and justify the opportunities in travel and street photography by producing content based on travel experiences.

OBJECTIVES

Discover how to use the fundamental elements of photography to convey a sense of place.

Learn about the fundamental tools of travel photography, from traditional techniques to the creative use of modern digital imaging resources.

Through assignments, location shoots, and the completion of a personal project, create expressive photographs that reveal your unique impression of a destination.

Reinforce the ongoing creation of travel photography both locally and globally.

NOVELTIES

This project found that travel and street photography is a type of photography in which the scenery, people, cultures and history of a location are documented.

The content generated by this study has a commercial value, and will be used to create a highly practical course that will teach you the skills necessary to succeed in the market for professional travel photographer.

You will learn how to properly research and write a travel feature, as well as how to create high-quality picture essays. Additionally, the lesson teaches you how to pitch your stories and photographs to editors.

ADVANTAGES

This course is designed for students to understand how to arrive at a new location with appropriate gear, attitude and completed research. They will be able to assess what they want to photograph, why they want to photograph and what they think they might like to do with the photographs.

The course covers both the technical and creative aspects of travel photography, allowing students to produce their own travel reportage.

USEFULNESS

The course provides practise in dealing with technical aspects as well as mastering the art of travel and street photography in order to capture both the representation and interpretation of place, which constitutes the language of travel photography. It allows you to sell your photos and earn money doing what you enjoy.

COMMERCIALISATION POTENTIAL

This course was created for the Massive Open Online Course (MOOC) learning method, and the assignments' publication can be found on the **Behance** platform.

This project can be viewed internationally and has been followed by many professional photographers, increasing the benefit to the owner of the photograph and making it more marketable.

Behance account: https://www.behance.net/travelphotogr



MOOC: https://ufuture.uitm.edu.my/mooc/course_detail.php?course=ADE473





Simplified method for number base conversions in Machine Level Representation of Data: UZI & SUZI

Siti Nursarjana Malim Adeline anak Engkamat

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Abstract

In Computer Science, one of the most important knowledge is about the machine-level representation of data. Since computers understand only numbers, it is also important to understand how number systems work in general, as a decimal system (base 10) is not the only number system known. As the computer architecture also supports other number systems, understanding different number systems and conversion techniques among them should also be studied. This knowledge is introduced in one of the topics in Computer Organization (CSC159) for conversion among binary, decimal, octal and hexadecimal numbers. Students are taught to convert number bases by using a scientific calculator and reference to conversion tables (whereby some students tend to memorize the conversion tables). However, there are some problems with the traditional method. Firstly, bringing the conversion table into the examination hall during the final examination is not allowed. Secondly, the scientific calculator cannot directly perform conversion of floating numbers and lastly, a scientific calculator has limitations of displaying only 10-16 digits (depending on calculator model) so it cannot be used to perform the conversion for numbers exceeding 16 bits such as 32-bit IEEE single-precision floating-point number. Therefore, UZI & SUZI method is introduced whereby this method implements the base code technique. This method helps students to do the conversion using the visual method that would speed up the conversion. By using this method, students would be dependent free from scientific calculators and conversion tables, like the abacus concept for calculations but applying it in computer data representation. This method can be introduced to learners in secondary schools (Form 1 & Form 2) and other fields such as electrical engineering & computer engineering.

Keywords: UZI & SUZI method , computer science, machine level representation of data

Simplified method for number base conversions in Machine Level Representation of Data: UZI & SUZI

TEACHING AND LEARNING POSTER IDEAS

Registration ID: TALPI130B

Simplified method for number base conversions in Machine Level Representation of Data: UZI & SUZI

By: Siti Nursarjana binti Malim & Adeline anak Engkamat

ABSTRACT

In Computer Science, one of the most important knowledge is about machine level representation of data. Since computers understand only numbers, it is also important to understand how number systems work in general, as decimal system (base 10) is not the only number system known. As the computer architecture also supports other number systems, understanding different number systems and conversion techniques among them should also be studied. This knowledge is introduced in one of the topics in Computer Organization (CSC159) for conversion among binary, decimal, octal and hexadecimal numbers. Students are taught to convert number bases by using scientific calculator and reference to conversion tables (whereby some students tend to memorize the conversion tables). However, there are some problems with the traditional method. Firstly, bringing conversion table into the examination hall during final examination is not allowed. Secondly, scientific calculator cannot directly perform conversion of floating numbers and lastly, scientific calculator has limitations of displaying only 10-16 digits (depending on calculator model) so it cannot be used to perform conversion for numbers exceeding 16 bits such as 32-bit IEEE single precision floating point number. Therefore, UZI & SUZI method is introduced whereby this method implement the base code technique. This method helps students to do conversion using visual method that would speed up the conversion. By using this method, students would be dependent free from scientific calculator and conversion tables, like abacus concept for calculations but applying it in computer data representation. This method can be introduced to learners in secondary schools (Form 1 & Form 2) and other fields such as electrical engineering & computer engineering.

1.0 OBJECTIVES

(TALPI) 2021

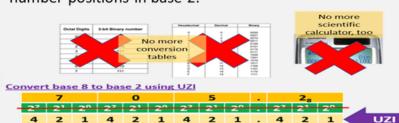
- 1. To help learners converting number for 3 number bases: base 2 (binary), base 8 (octal) and base 16 (hexadecimal) by using UZI and SUZI method.
- 2. To help learners visualize the values of conversion easier.

2.0 ADVANTAGES

- □ Conversion can be done by using scientific calculator. However, there are TWO limitations of using calculator.
- 1. Number of bits to display (10-16 digits only)
- 2. Cannot perform conversions for floating numbers directly
- □ So, UZI and SUZI method can overcome these limitations.

3.0 USEFULNESS

- □ Learners can memorize-free the list of numbers for binaryoctal or binary-hexadecimal, because memorizing sometimes may lead to confusion.
- □ UZI and SUZI method simplified values represented by number positions in base 2.



- A 6 1₁₆

 21 2² 21 20 21 2² 21 2⁰ 21 2² 21 2⁰

 8 4 2 1 8 4 2 1 8 4 2 1

 1 0 1 0 0 1 1 0 0 0 0 0 0 1₂

4.0 NOVELTY

- Existing methods applied mathematical equations to explain the steps of number conversion. Learners need to derive the equations by remembering the numbering position.
- 2. UZI and SUZI method uses visualization technique, where learners only need to remember the codes for number position, 421 (UZI) and 8421 (SUZI).
- 3. This UZI and SUZI method is easy for learners to follow, and it is possible to eliminate the dependency on calculators during assessments.
- 4. UZI and SUZI method is simple, easy and produce faster conversion.

5.0 COMMERCIALISATION POTENTIAL

LY2021E03531 - COPYRIGHT VOLUNTARY NOTIFICATION (UZI & SUZI METHOD)

This method can be introduced to learners in secondary schools (Form 1 & Form 2 – Asas Sains Komputer subject) and other fields such as electrical engineering & computer engineering.



6.0 INVENTORS



Siti Nursarjana binti Malim



Adeline anak Engkamat

Teaching Urogynaecology for Medical Students: A Multimodal Approach

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Abstract

Introduction to Urogynaecology common disorders is part of the curriculum in Obstetrics and Gynaecology (O&G) for undergraduates. The COVID-19 pandemic limits the traditional delivery of the subject due to the lack of face-toface learning sessions and students' access to clinical areas. A multimodal approach using the technology available was crafted to ensure the students can learn effectively and achieve the learning objectives despite current challenges. An innovative approach by combining pre-recorded lectures, a Massive Open Online Course (MOOC) tailor-made for medical students and an interactive tutorial has been utilized as a strategy to deliver the Urogynaecology module. Pre-recorded lectures on essential topics are provided earlier to allow students to go through them before the scheduled tutorial. A MOOC on 'Urogynaecology for medical students' is made freely accessible, supplemented with clinical images, surgical videos, quizzes, and assessments. Finally, a 2- hour interactive tutorial using Mentimeter is carried out to strengthen students' understanding. It covers a recap of the salient point that they must know, addressing any questions from the students, followed by a quiz encompassing MCQs, BAQs and PBQs, performed real-time using Mentimeter. An immediate discussion based on the students' answers benefits the students and allows the lecturer to identify areas of weakness that require further emphasis. This multimodal approach allows optimal and effective use of the limited 2-hour formal teaching time. A feedback survey among 222 students that have utilized this multimodal approach demonstrated majority either strongly agree or agree that this approach helps them to achieve their learning objectives (98.6%), easy to understand (94.1%), and combination of the methods is complimentary in helping them to understand the subject(95.9%). In conclusion, the multimodal approach in teaching Urogynaecology for medical students is effective and will be continued in future. This will enhance students' face-to-face learning and their clinical experience in learning Urogynaecology.

Keywords: Urogynaecology, MOOC, Obstetrics and Gynaecology

Teaching Urogynaecology for Medical Students: A Multimodal Approach





TEACHING UROGYNAECOLOGY FOR MEDICAL STUDENTS: A MULTIMODAL APPROACH

ABSTRACT

Introduction to Urogynaecology common disorders is part of the curriculum in Obstetrics and Gynaecology (O&G) for undergraduates. The COVID-19 pandemic limits the traditional delivery of the subject due to the lack of face-to-face learning sessions and students' access to clinical areas.

A multimodal approach using the technology available was crafted to ensure the students can learn effectively and achieve the learning objectives despite current challenges. An innovative approach by combining pre-recorded lectures, a Massive Open Online Course (MOOC) tailor-made for medical students and an interactive tutorial has been utilised as a strategy to deliver the Urogynaecology module.

Pre-recorded lectures on essential topics are provided earlier to allow students to go through them before the scheduled tutorial. A MOOC on 'Urogynaecology for medical students' is made freely accessible, supplemented with clinical images, surgical videos, quizzes, and assessments. Finally, a 2-hour interactive tutorial using Mentimeter is carried out to strengthen students' understanding. It covers a recap of the salient point that they must know, addressing any questions from the students, followed by a quiz encompassing MCQs, BAQs and PBQs, performed real-time using Mentimeter. An immediate discussion based on the students' answers benefits the students and allows the lecturer to identify areas of weakness that require further emphasis. This multimodal approach allows optimal and effective use of the limited 2-hour formal teaching time.

A feedback survey among 222 students that have utilised this multimodal approach demonstrated majority either strongly agree or agree that this approach helps them to achieve their learning objectives (98.6%), easy to understand (94.1%), and combination of the methods is complimentary in helping them to understand the subject(95.9%).

In conclusion, the multimodal approach in teaching Urogynaecology for medical students is effective and will be continued in future. This will enhance students' face-to-face learning and their clinical experience in learning Urogynaecology

1.0 OBJECTIVES

To provide an effective teaching delivery method for Urogynaecology module

To provide engaging and beneficial learning tools for medical students to learn Urogynaecology module

3.0 USEFULNESS

This multimodal approach of Urogynaecology module can

- Allows optimal and effective use of 2 hours formal teaching session
- Assist students' self-directed learning as materials and guidance provided
- Give ample assistance for students to understand the subject – theory, clinical images, surgical videos, quizzes, assessment.
- Be used for revision by students anytime they need (pre-recorded lecture and MOOC)

2.0 ADVANTAGES

Tally with undergraduate syllabus
Allows clinical exposure through example of clinical cases, clinical images and surgical videos
Students can learn at their own time and pace
Allows lectures to emphasize on essential point during the formal teaching session

4.0 NOVELTY

A multimodal approach for the Urogynaecology module is an innovation that include MOOC: Urogynaecology for medical students, the first urogynaecology module specifically designed for medical students that is made freely available online. It is developed on the Open learning platform that is user-friendly for students to use.

https://www.openlearning.com/courses/urogynaecology-for-medical-students/?cl=1&showLanding=true

5.0 COMMERCIALISATION POTENTIAL

The MOOC can potentially be charged with a small fee. However, it is made free access for the time being.

6.0 INVENTORS

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IG.MACH (Instagram Marketing Challenge)

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Abstract

The emergence of technology, especially social media has caused a great impact on traditional marketing practices. It has proven that social media is essential in reaching customers and growing brands. Instagram is chosen as the platform due to its popularity, cost-effectiveness and functionality. The objectives of this program are to expose students to real experience and equip them with the basic skills of social media marketing. The blend of theory and application will provide the opportunity for the students to gain hands-on experience in promoting products and services through Instagram. The program can be carried out during both face-to-face and ODL modes of learning, where the students can work virtually, anywhere and anytime. Targeted at students that range from secondary school to undergraduates, who are taking basic or fundamentals of marketing, people with zero knowledge of social media marketing, as well as people with special needs, the participants will work in groups and complete a seven-week small scale simulation program. As this is a competition or business game, it will motivate the students to give their best and it is hoped that this experiential learning will produce digital marketing talent in the near future. The program has the potential to be developed as a micro-credential program, community-based or service-learning program, with a structured e-module that aims at helping small businesses to initiate their digital promotion campaign in the most economical way.

Keywords: Instagram Marketing Challenger, traditional marketing, competition

IG.MACH (Instagram Marketing Challenge)



ABSTRACT

The emergence of technology, especially social media has caused a great impact on the traditional marketing practices. It has proven that social media is essential in reaching customers and growing brands. Instagram is chosen as the platform due to its popularity, cost-effectiveness and functionality. The objectives of this program are to expose students to the real-world experience and equip them with the basic skills of social media marketing. The blend of theory and application will provide the opportunity to the students to gain hands-on experience in promoting products and services through Instagram. The program can be carried out during both face-to-face and ODL modes of learning, where learners can work virtually, at anywhere and anytime. Targeted at students ranging from secondary school to undergraduates, students who are taking basic or fundamentals of marketing to people with zero knowledge of social media marketing, the participants will work in groups and complete an online simulation competition. As this is a competition, it will motivate the students to give their best and it is hoped that this experiential learning will produce digital marketing talent in the near future. The program has the potential to be developed as a micro credential course, community based or service learning program, with structured e-module that aims at helping small businesses to initiate their digital promotion campaign in the most economical way. In the future, inventors also plan to customised the program for people with special needs who want to embark on social media marketing.

1.0 OBJECTIVES

- To expose learners to real-world social media marketing experience
- To equip them with basic skills of social media marketing

3.0 USEFULNESS

- Allows learners to learn basic social media marketing skills in the most economical way
- Effective way to teach social media marketing during both face-to-face and ODL modes of learning

5.0 COMMERCIALISATION POTENTIAL

- E-module
- Community based or service learning
- Micro credential course for beginners
- Can be customized for teaching people with special needs

2.0 ADVANTAGES

- Cost-effective
- Numerous benefits of using IG for marketing
- Opportunity to gain hands-on experience with minimal risks

4.0 NOVELTY

- A simulation program that covers the most basic social media marketing skills
- Learners will compete online and the top 5 will receive recognition and rewards
- Experiential learning to stimulate technologically illiterate people to adopt social media for business

6.0 INVENTORS

- Nazihah Omar
- Ferri Nasrul
- Nor Hazila Ismail
- · Maizura Md Isa
- Mazida Ismail

Modelling an Efficient Evaluation of a Final Year Project Using Hesitant Fuzzy Sets (HFS)

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Abstract

The final year project (FYP) is a required course for all undergraduate students who wish to graduate. This final year project, which is often performed individually or in groups, is limited to four students. Frequently, the FYP report is assessed by two or more evaluators. However, there are a few issues with the current evaluation system. To begin, evaluators are sometimes hesitant to assign ratings to specific criteria. The second problem is evaluator is less familiar with the FYP report and has a poor comprehension of the student's FYP project. The last issue is the considerable discrepancy in opinion between the first and second evaluators. Thus, the study's initial aim was to address the issue of evaluator skepticism by including the hesitant fuzzy set (HFS) into the evaluation process. This technique enables the evaluator to enter more than one value in order to resolve these uncertainties. The second aim is to provide weights to each evaluator who assesses a project based on their expertise on an FYP report, and the third objective is to close the score difference between the first and second evaluators by adding a third evaluator. The uniqueness of this study is the introduction of a new evaluation model that is more clear, effective, and addresses the shortcomings of the previous approach. Commercialization of this model to the point that it can be used to evaluate final year projects for all FYP courses offered by all institutions.

Keywords: Hesitant Fuzzy Sets, Final year project, report

Modelling an Efficient Evaluation of a Final Year Project Using Hesitant Fuzzy Sets (HFS)





MODELLING AN EFFICIENT EVALUATION OF A FINAL YEAR PROJECT USING HESITANT FUZZY SETS (HFS)

(ID.NO: TALPI135B)

ABSTRACT

The final year project (FYP) is a required course for all undergraduate students who wish to graduate. This final year project, which is often performed individually or in groups, is limited to four students. Frequently, the FYP report is assessed by two or more evaluators. However, there are a few issues with the current evaluation system. To begin, evaluators are sometimes hesitant to assign ratings to specific criteria. The second problem is evaluator is less familiar with the FYP report and has a poor comprehension of the students FYP project. The last issue is the considerable discrepancy in opinion between the first and second evaluators. Thus, the study's initial aim was to address the issue of evaluator scepticism by including the hesitant fuzzy set (HFS) into the evaluation process. This technique enables the evaluator to enter more than one value in order to resolve these uncertainties. The second aim is to provide weights to each evaluator who assesses a project based on their expertise on an FYP report, and the third objective is to close the score difference between the first and second evaluators by adding a third evaluator. The uniqueness of this study is the introduction of a new evaluation model that is more clear, effective, and addresses the shortcomings of the current approach. Commercialization of this model to the point that it can be used to evaluate final year projects for all FYP courses offered by all institutions.

1.0 OBJECTIVES

- 1. to incorporate the hesitant fuzzy set (HFS) into the assessment process.
- 2. to provide weights to each evaluator who conducts an FYP report depending on their competence.
- 3. to eliminate the disparity in scores between the first and second assessors.

3.0 USEFULNESS

The proposed assessment model is extremely beneficial and applicable to all FYP courses provided by all institutions.

DIFFERENT EVALUATOR WEIGHTS BASED ON EXPERIENCE IN **EVALUATOR 1 EVALUATOR 3 EVALUATOR 2** CRITERIA RATING **CRITERIA RATING CRITERIA RATING USING HFS USING HFS USING HFS** HIGHER THAN **POINTS** YES NO NO **FINAL MARKS** FINAL MARKS (EVALUATORS 1&2) (EVALUATORS 1,2 & 3)

2.0 ADVANTAGES

- 1. to alleviate assessors' apprehension in assigning scores to particular criteria.
- 2. To address the issue of an assessor who is unfamiliar with the FYP report and has a limited understanding of the students' FYP project.
- 3. To classify disagreements between the first and second evaluators

4.0 NOVELTY

introduces a new assessment methodology that is more transparent, effective, and solves the flaws in the existing technique.

5.0 COMMERCIALISATION POTENTIAL

This model is marketable to all lecturers responsible for FYP subjects. Additionally, this proposed method is effective and appropriate for use in universities for various types of evaluations that involve multiple evaluators.

6.0 INVENTOR

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Roll-A-Gram

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Abstract

Grammar, in particular Parts of Speech is not only a complex subject matter for undergraduate students, but also for those who have vast experience in English Language learning. This study aims to develop a language learning tool in tandem with the emphasis on the topics of Adjectives and Adverbs for semester one Diploma students. Roll-A-Gram encourages students' engagement based on a concept adapted from the Snakes and Ladders board game. Roll-A-Gram is developed by gathering general analysis and requirements as the first step. In product design, Microsoft Visual Studio Professional 2017 (Version 15.9.37) and Microsoft .NET Framework is employed while the third-party extension for the visual studio uses the Extended.Wpf.Toolkit, Fujino.CustomMessageBox.Wpf and Gu.Wpf.Adorners. Roll-A-Gram is built through the coding process. Then the test is run, and the code is adjusted until it passes the Test-Driven Development (TDD). The final phase in the development of Roll-A-Gram is the deployment of the product. Roll-A-Gram has opened a beta phase that involves real use by the clients. The students will embark on a fun quest in scoring the highest mark by answering questions related to Adjectives and Adverbs along the way. Roll-A-Gram provides students an alternative to explore Adjectives and Adverbs in a fun and interactive manner. This differs from the traditional format of grammar exercise that mainly provides drill practice instead of encouraging thinking skills. As a result, Roll-A-Gram promotes incidental learning as well as collaborative learning among students. Roll-A-Gram can be a valuable learning tool in the teaching of Grammar as there is still a limited variety of products or applications that support the learning of Adjectives and Adverbs.

Keywords: Roll-A-Gram, English Language learning, coding process

Roll-A-Gram

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



MODELLING AN EFFICIENT EVALUATION OF A FINAL YEAR PROJECT USING HESITANT FUZZY SETS (HFS)

(ID.NO: TALPI135B)

ABSTRACT

The final year project (FYP) is a required course for all undergraduate students who wish to graduate. This final year project, which is often performed individually or in groups, is limited to four students. Frequently, the FYP report is assessed by two or more evaluators. However, there are a few issues with the current evaluation system. To begin, evaluators are sometimes hesitant to assign ratings to specific criteria. The second problem is evaluator is less familiar with the FYP report and has a poor comprehension of the students FYP project. The last issue is the considerable discrepancy in opinion between the first and second evaluators. Thus, the study's initial aim was to address the issue of evaluator scepticism by including the hesitant fuzzy set (HFS) into the evaluation process. This technique enables the evaluator to enter more than one value in order to resolve these uncertainties. The second aim is to provide weights to each evaluator who assesses a project based on their expertise on an FYP report, and the third objective is to close the score difference between the first and second evaluators by adding a third evaluator. The uniqueness of this study is the introduction of a new evaluation model that is more clear, effective, and addresses the shortcomings of the current approach. Commercialization of this model to the point that it can be used to evaluate final year projects for all FYP courses offered by all institutions.

1.0 OBJECTIVES

- 1. to incorporate the hesitant fuzzy set (HFS) into the assessment process.
- 2. to provide weights to each evaluator who conducts an FYP report depending on their competence.
- to eliminate the disparity in scores between the first and second assessors.

3.0 USEFULNESS

The proposed assessment model is extremely beneficial and applicable to all FYP courses provided by all institutions.

DIFFERENT EVALUATOR WEIGHTS BASED ON EXPERIENCE IN THE FYP FIELD **EVALUATOR 1 EVALUATOR 2 EVALUATOR 3 CRITERIA RATING** CRITERIA RATING CRITERIA RATING **USING HFS USING HFS USING HFS** HIGHER THAN MORE THAN 1 **POINTS** NO NO FINAL MARKS FINAL MARKS (EVALUATORS 1&2) (EVALUATORS 1,2 & 3)

2.0 ADVANTAGES

- 1. to alleviate assessors' apprehension in assigning scores to particular criteria.
- 2. To address the issue of an assessor who is unfamiliar with the FYP report and has a limited understanding of the students' FYP project.
- 3. To classify disagreements between the first and second evaluators

4.0 NOVELTY

introduces a new assessment methodology that is more transparent, effective, and solves the flaws in the existing technique.

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This model is marketable to all lecturers responsible for FYP subjects. Additionally, this proposed method is effective and appropriate for use in universities for various types of evaluations that involve multiple evaluators.

6.0 INVENTOR

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Paper Star Reward, PSR for Integrating Sunnah

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Abstract

"Melentur buluh biarlah dari rebungnya" is a Malay proverb emphasizing the importance of teaching children from an early age. Living the sunnah is part and parcel of the Islamic Faith and as an Islamic early childhood centre, it is the responsibility of the teacher to integrate the sunnah into the students. Paper Star Reward or PSR is a program created to encourage students to adopt the sunnah in their daily routine. The teacher will teach the students to make these paper stars from recycled papers in the centre, be it from the student's worksheet or books. Each student is also required to fashion a container from recycled material to place their well-earned star. This would promote recycling to the kids while improving the student's fine motor skills when making them. The first phase of the program starts by teaching the students the act of sunnah. One example would be to first put on the right side of a shoe or sandal and to first take off the left shoe or sandal. For a brief period, the teacher will constantly remind the students to practice this sunnah. The following phase involves the teacher monitoring the students' said sunnah habit, for example, placing and taking off shoes or sandals. Every time a student follows the sunnah, a paper star is placed in their respective container. After some time, the teacher will let the students do it on their own. Once their collection of stars reaches a set target, the students will count them and exchange them for a reward. The teacher will continuously monitor the student's activity to a point where the sunnah is integrated into their daily routine. It is observed that the sunnah adaptation percentage is significantly higher than just verbally reminding the students.

Keywords: Paper Star Reward, sunnah, program

Paper Star Reward, PSR for Integrating Sunnah





PAPER STAR REWARD, PSR FOR INTERGRATING SUNNAH

ABSTRACT

"Melentur buluh biarlah dari rebungnya" is a Malay proverb emphasizing the importance of teaching children from an early age. Living the sunnah is part and parcel of the Islamic Faith and as an Islamic early childhood centre, it is the responsibility of the educator to integrate the sunnah into the students. Paper Star Reward or PSR is a program created to encourage students to adopt the sunnah in their daily routine. The educator will teach the students to make these paper stars from recycled papers in the centre, be it from the student's worksheet or books. Each student is also required to fashion a container from recycled material to place their well-earned star. This would promote recycling to the kids while improving the students fine motor skills when making them. The first phase of the program starts by teaching the students the act of sunnah. One example would be to first put on the right side of a shoe or sandal, and to first take off the left shoe or sandal. For a brief period, the educator will constantly remind the students to practice this sunnah. The following phase involves the educator monitoring the students' said sunnah habit, for example the placing and taking of shoes or sandals. Every time a student follows the sunnah, a paper star is placed in their respective container. After sometime, educator will let the students to do it on their own. Once their collection of stars reaches a set target, the students will count them and exchange them for a reward. The educator will continuously monitor the student's activity to a point where the sunnah is integrated into their daily routine. It is observed that the sunnah adaptation percentage is significantly higher than just verbally reminding the students.

1.0 OBJECTIVES

- Encourage the adoption of sunnah
- Promotes recycling

3.0 USEFULNESS

- · Fun encouraging activity
- Improves fine motor skill

5.0 COMMERCIALISATION POTENTIAL

 Can be sold as ready made kit for home use

2.0 ADVANTAGES

- Easily implemented
- Simple and economical
- Proven outcome

4.0 NOVELTY

 Associate the adoption of sunnah with a fun activity

6.0 INVENTORS

- Nur Farahiah Binti Ibrahim
- Syazwani Bt Jeraee
- Siti Norjunaidah Binti Sapee
- Nur Fazirah Bt Mohammad
- Chris Hazel Ak Christus

Open Learning Platform in Medical Physiology: Promoting Student Engagement and Interaction

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Abstract

Open educational resources (OER) are materials for learning that are either in the public domain or have been released under a license that allows them to be freely used. OER allows educators to customize teaching and learning and support student learning engagement and interaction. We had made an initiative to create a website: phy.medicuitm.com as a novel open platform of OER to upload all medical physiology teaching materials, thus facilitating our students in teaching and learning. This open platform is openly available for use by our students without the need to key in login ID and password. All the teaching materials uploaded on this website are copyright protected (MyIPO) and licensed under creative commons by attribution 4.0. This open platform is developed via an approach of using Content Management System software. This platform allows the educators to provide all teaching and learning materials with interactive pathways using multiple educational technologies and interactive tools such as Genially, Playposit and Padlet. This can create a learning experience and real-time interaction between educators and students, thus consolidating students' understanding. The open platform also promotes students' participation and communication experiences in the subject matter. With interactivity, information becomes easier to digest and process for each and every one of our students. This open platform is also designed to suit the self-paced learning method for medical physiology subjects in which the student is able to control the amount of material they consume as well as the duration of time they need to learn the new information properly, thus enhancing student's engagement. It is hoped that this open platform will benefit our UiTM medical students and increase their performance in learning. Interestingly, feedback given by our students through the circulated survey indicated that students preferred this type of interactive learning mode compared to the didactic learning mode.

Keywords: Open educational resources, Medical Physiology, medical students

Open Learning Platform in Medical Physiology: Promoting Student Engagement and Interaction

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



OPEN LEARNING PLATFORM IN MEDICAL PHYSIOLOGY: PROMOTING STUDENT ENGAGEMENT AND INTERACTION

ABSTRACT

Open educational resources (OER) are materials for learning that are either in the public domain or have been released under a license that allows them to be freely used. OER allow educators to customize teaching and learning and support student learning engagement and interaction. We had made an initiative to create a website: phy.medicuitm.com as a novel open platform of OER to upload all medical physiology teaching materials, thus facilitating our students in teaching and learning. This open platform is openly available for use by our students without the need to key in user ID and password. All the teaching materials uploaded on this website are copyright protected (MyIPO) and licensed under creative commons by attribution 4.0. This open platform is developed via an approach of using Content Management System software. This platform allows the educators to provide all teaching and learning materials with interactive pathway using multiple educational technology and interactive tools such as Genially, Playposit and Padlet. This can create learning experience and real-time interaction between educators and students, thus consolidate students' understanding. Open platform also promotes student's participation and communication experiences in the subject matter. With interactivity, information becomes easier to digest and process for each and every one of our students. This open platform is also designed to suit the self-paced learning method for medical physiology subject in which the student is able to control the amount of material they consume as well as the duration of time they need to learn the new information properly, thus enhance students' engagement. It is hoped that this open platform will benefit our UiTM medical students and increase their performance in learning. Interestingly, feedback given by our students through circulated survey indicated that students preferred this type of interactive learning mode compared to didactic learning mode.

1.0 OBJECTIVES

phy.medicuitm.com is designed to promote engaging online learning in physiology as well as student learning interaction.
 Physiology is one of the most



basic and important concept that medical students need to understand. Learning physiology should be fun incorporating an engaging process as the subject matter is often considered as one of the difficult subjects for the medical students to comprehend. To aid students' understanding, interactivity and engagement, a new interactive pathway subject matter is created through open platform of **phy.medicuitm.com**. A series of interactive, fun engaging presentations, videos and contents are created, addressing the concept of physiology in this platform.

3.0 USEFULNESS

This open platform is using multiple educational technology and interactive tools which can create learning and communication experiences and enhance students' communication skill in the subject matter. With interactivity, information becomes easier to digest and process for each and every one of our students. Equally, the approach is expected to develop/maximize; memorization, critical thinking and creativity. So, this in turn, will increase students' participation, customize learning, and class motivation. Feedback given by our students through circulated survey indicated that **students preferred this type of interactive learning mode** compared to didactic learning mode. Besides, flipping classroom approach is easier to conduct through this open platform.

5.0 COMMERCIALISATION POTENTIAL

All the teaching materials uploaded on this website are copyright protected (MyIPO) and licensed under creative commons by attribution 4.0. With this copyright and license, this open platform has a potential to be commercialized and to reach out wider students outside UiTM.

In another point of view, skill possessed by the inventor in creating open platform can be used to give a consultation service and training to other educators that are interested in creating their own open platform for teaching and learning.

2.0 ADVANTAGES

This platform is really practical because students are able to get access to all physiology learning materials in this website without the need to login their user ID and password. They have **unlimited access to this website** to learn at their own pace. This open platform is designed to suit the self-paced learning method in which the student is able to control the amount of material they consume as well as the duration of time they need to learn the new information properly. This interactive platform allows the student to communicate directly with the instructor at any time. Students can insert ideas and questions

anonymously or with their name in the provided Padlet tool. It is easy to use and all students can see what everyone is asking and what the educator's Answers pertaining to that questions.



This interactive learning pathway using website platform is very practical and convenient for the educators as this platform is a **real-time platform**. It allows the educators to embed all types of tools and learning materials. In addition, we are flexible to design the interface of platform according to our preferences.

4.0 NOVELTY



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phy.medicuitm.com is a novel open platform facilitating our students in teaching and learning medical physiology. This platform is openly available for use by our students without the need to key in user ID and password. All the learning materials uploaded on this platform are presented in a series of multiple interactive and collaborative teaching slides and videos using multiple tools. All the teaching materials uploaded on this website are copyright protected (MyIPO) and licensed under under creative commons by attribution 4.0. One of subject uploaded in this open platform; Interactive Blood Pressure Class has won Gold Award for OER during recent eCONDEV 2021.

6.0 INVENTOR

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DISCORD: A Platform for Active Learning Experience

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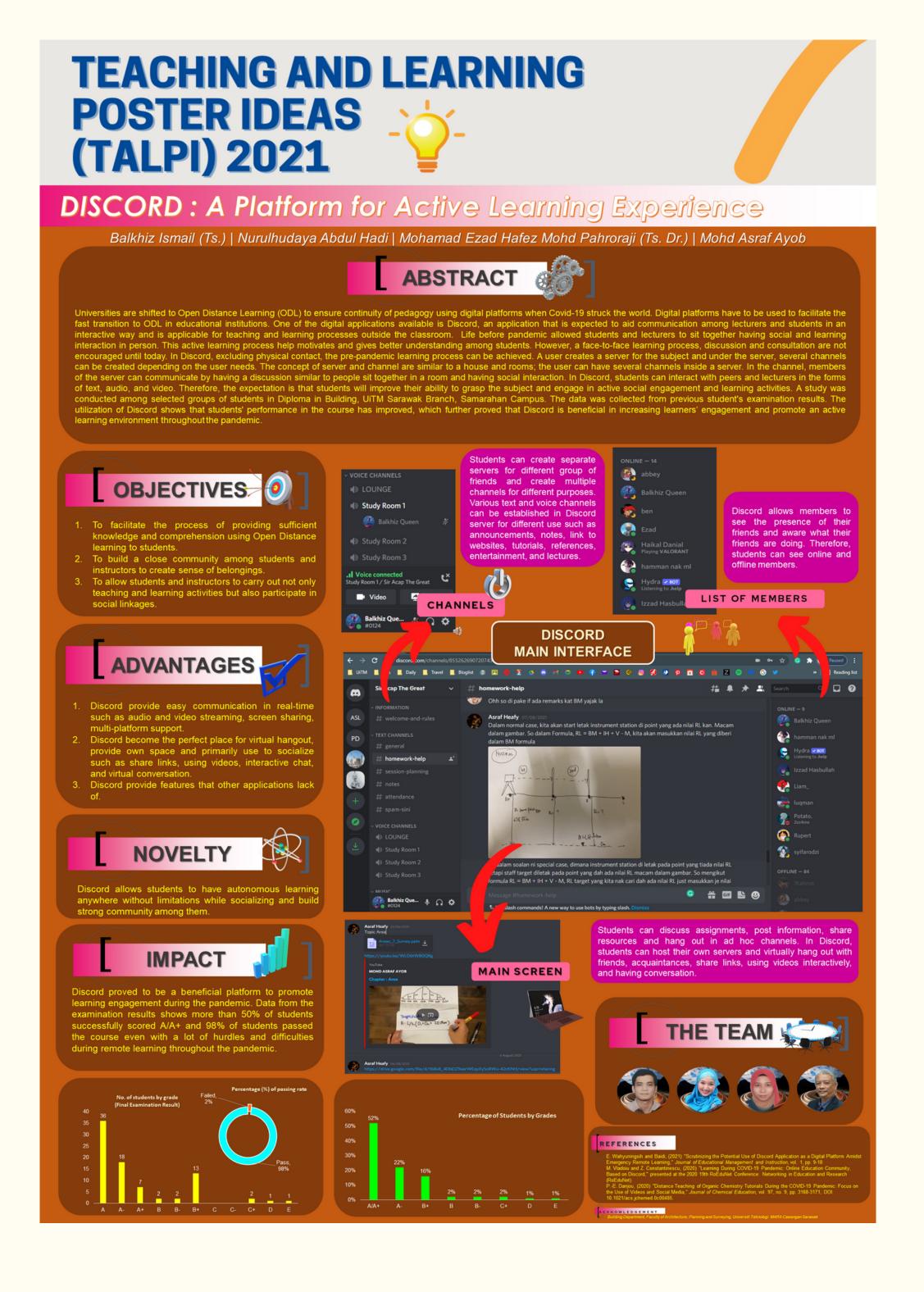
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Abstract

When Covid-19 hit the world, most universities shifted to Open Distance Learning (ODL). Digital platforms have to be used to facilitate the fast transition to ODL in educational institutions. One of the digital applications available is Discord; an application that is expected to aid communication among lecturers and students in an interactive way and is applicable for teaching and learning processes outside the classroom. The pre-pandemic learning process can be achieved in Discord because students and lecturers were not encouraged to have face-to-face learning, discussion, and consultation during the pandemic. A user creates a server for the course, and within the server, multiple channels can be created based on the user's needs. The server (classroom/course) and channels (topic/groups of students) concepts are similar to the physical meet. Members of the server can converse in the channel by holding a discussion, much like how people communicate and interact socially in real life. Students can communicate with peers and lecturers via text, audio, and video. Therefore, students should expect to improve their understanding, have autonomous learning anywhere without limitations while socializing and build a strong community among them. A study was conducted among a selected group of students in Diploma in Building, Universiti Teknologi MARA, Cawangan Sarawak. The data was gathered from previous students' examination results. The utilization of Discord represented the students' performance in the course has improved, which further proved that it is beneficial in increasing learners' engagement and promoting an active learning environment throughout the pandemic

Keywords: Open educational resources, DISCORD, digital applications

DISCORD: A Platform for Active Learning Experience



Hybrid Learning Approach Using Flipped Classroom and Breakout Room for Online Blended Learning

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Abstract

The main challenge faced by many academicians when conducting lectures during the Covid-19 pandemic is to gain students' learning attention and participation. Online classes that teach courses such as machine learning using data science software platforms require a fundamental understanding of the basic concept and hands-on activities. Online learning often suffers from a lack of student understanding hence diversion from learning focus and active participation. The study proposes flipped classroom method integrated with breakout rooms session as hybrid online blended learning approaches to gain students' participation and maintain their learning focus throughout the learning activities. It outlines each process involved and how the activities mapped to the expected learning outcomes. The activity includes self-learning through short, recorded explainer video, answering short quizzes and break-out room discussion for a small group of participants. The proposed approach provides an interesting learning experience and expects to gain active anticipation from the learners. Learners are hoped to improve their knowledge on the subject matter as well as self-learn skills that are much important during this emerged of online blended learning period.

Keywords: Hybrid Learning Approach, flipped classroom, students

Hybrid Learning Approach Using Flipped Classroom and **Breakout Room for Online Blended Learning**



TEACHING AND LEARNING HYBRID LEARNING APPROACH USING FLIPPED CLASSROOM AND BREAKOUT ROOM FOR ONLINE BLENDED LEARNING

ABSTRACT

The main challenge faces by many academicians when conducting lecture during the Covid-19 pandemic is to gain student's learning attention and participation. Online classes that teach courses such as machine learning using data science software platform require fundamental understanding of the basic concept and hands-on activities. The online learning often suffers from lack of student's understanding hence diversion from learning focus and active participation. The study proposes flipped classroom method integrated with breakout rooms session as hybrid online blended learning approaches to gain student's participation and maintain their learning focus throughout the learning activities. It outlines each processes involved and how the activities mapped to the expected learning outcomes. The activity includes self-learning through short, recorded explainer video, answering short quizzes and break-out room discussion for small group of participants. The proposed approach provides an interesting learning experience and expect to gain active anticipation from the learners. Learners are hoped to improve their knowledge on the subject matters as well as self-learn skills that is much important during this emerged of online blended learning period

OBJECTIVES

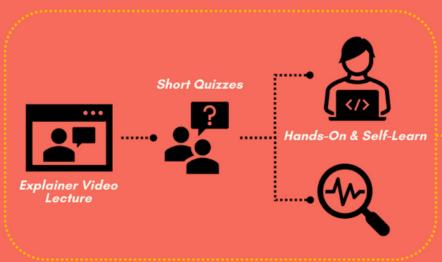
- To provide appropriate online learning method for delivering massive conceptual and skillbased learning content
- To impart learning activities that will improve student's learning experience
- To prepare knowledgable and proficient student both hard and soft skills

OUTCOMES & ADVANTAGES

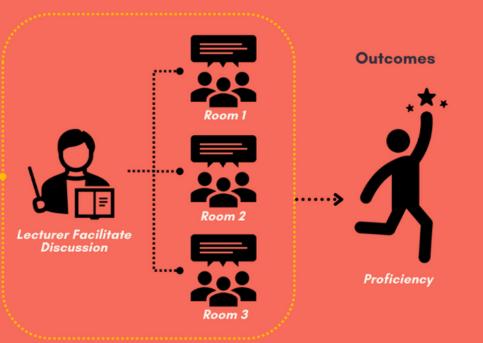
- Maintain high focus and learning time-span
- Elevate interest and understanding in learning subject through hands-on experience
- Increase participation in learning activities and
- Improve overall student's knowledge and soft-skills
- Achieve course learning outcome (CLO) and programme learning outcome (PLO)

METHODS

Flipped Classroom Method [Asynchronous Session]



Breakout Room Method [Synchronous Session]





INVENTORS:

- Ts. Dr. Lucyantie Binti Mazalan (Leader)
- Assoc. Prof. Ts. Dr. Norliza Binti Mohamad Zaini
- Assoc. Prof. Ir. Ts. Dr. Husna Binti Zainol Abidin

AFFILIATION:

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Model Pembentukan Pembelajaran Bermakna Secara atas Talian

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Abstrak

Pengajaran dan pembelajaran atas talian menjadi satu keutamaan bagi kelangsungan pendidikan semenjak berlakunya pandemic Covid-19. Namun begitu, komunikasi dan hubungan kemanusiaan yang terhad menjadi cabaran kepada para pendidik untuk mewujudkan pembelajaran yang bermakna untuk pelajar. Kejayaan pengajaran dan pembelajaran tidak sekadar diukur dari sudut pencapaian gred A atau lulus, tetapi juga setakat mana pelajar dapat menghayati dan mengamalkan ilmu, kemahiran dan nilai yang diperolehi dalam kehidupan harian mereka. Tujuan akhir setiap proses pendidikan ialah untuk melahirkan individu pelajar yang berilmu, berakhlak, berkemahiran dan berkesedaran untuk menyumbang kepada kebaikan dan kemajuan masyarakat dan negara. Justeru, para pendidik perlu berusaha memastikan wujudnya sesi pembelajaran bermakna untuk semua pelajar, meskipun hubungan guru dan pelajar terhad di atas talian. Kajian ke atas 121 orang pelajar mengenai faktor pembentukan pembelajaran bermakna mendapati empat faktor penting perlu diambil perhatian serius oleh para pendidik. Empat faktor tersebut ialah personaliti pensyarah, suasana pembelajaran, pengajaran berstruktur dan keterhubungan. Kajian ini mengetengahkan empat faktor ini dalam satu Model Pembelajaran Bermakna Peringkat IPT agar dapat menjadi panduan para pendidik mewujudkan pembelajaran bermakna yang dapat memberi kesan kepada kehidupan pelajar bukan sekadar dari sudut ilmu tetapi juga dari sudut nilai dan akhlak.

Kata Kunci: Pembelajaran bermakna, pendidikan nilai, pendidik, mahasiswa dan pelajar

Model Pembentukan Pembelajaran Bermakna Secara atas Talian





MODEL PEMBENTUKAN PEMBELAJARAN BERMAKNA SECARA ATAS TALIAN

ABSTRAK

Pengajaran dan pembelajaran atas talian menjadi satu keutamaan bagi kelangsungan pendidikan semenjak berlakunya pandemic Covid-19. Namun begitu, komunikasi dan hubungan kemanusiaan yang terhad menjadi cabaran kepada para pendidik untuk mewujudkan pembelajaran yang bermakna untuk pelajar. Kejayaan pengajaran dan pembelajaran tidak sekadar diukur dari sudut pencapaian gred A atau lulus, tetapi juga setakat mana pelajar dapat menghayati dan mengamalkan ilmu, kemahiran dan nilai yang diperolehi dalam kehidupan harian mereka. Tujuan akhir setiap proses pendidikan ialah untuk melahirkan individu pelajar yang berilmu, berakhlak, berkemahiran dan berkesedaran untuk menyumbang kepada kebaikan dan kemajuan masyarakat dan negara. Justeru, para pendidik perlu berusaha memastikan wujudnya sesi pembelajaran bermakna untuk semua pelajar, meskipun hubungan guru dan pelajar terhad di atas talian. Kajian ke atas 121 orang pelajar mengenai faktor pembentukan pembelajaran bermakna mendapati empat faktor penting perlu diambil perhatian serius oleh para pendidik. Empat faktor tersebut ialah personaliti pensyarah, suasana pembelajaran, pengajaran berstruktur dan keterhubungan. Kajian ini mengetengahkan empat faktor ini dalam satu Model Pembelajaran Bermakna Peringkat IPT agar dapat menjadi panduan para pendidik mewujudkan pembelajaran bermakna yang dapat memberi kesan kepada kehidupan pelajar bukan sekadar dari sudut ilmu tetapi juga dari sudut nilai dan akhlak.

1.0 OBJEKTIF

Menjelaskan empat faktor utama pembentukan pembelajaran bermakna dari persepsi pelajar IPT.

2.0 KELEBIHAN

- Model ini boleh menjadi rujukan pantas pendidik dalam mereka bentuk pengajaran kerana mudah difahami dan dikaitkan dengan pengajaran dan pembelajaran yang efektif.
- Memberikan kepuasan kepada pendidik untuk merekabentuk pengajaran yang efektif dan yang mendorong pembelajaran bermakna.
- Memberikan garis panduan untuk pelajar untuk merealisasikan konsep "self-determined and directed learning" kerana pelajar diberi autonomi ke atas pembelajaran dengan dibimbing oleh pendidik.
- Sesuai dikembangkan bawah model penjajaran konstruktif yang dapat merangka objektif, aktiviti dan penilaian pembelajaran.

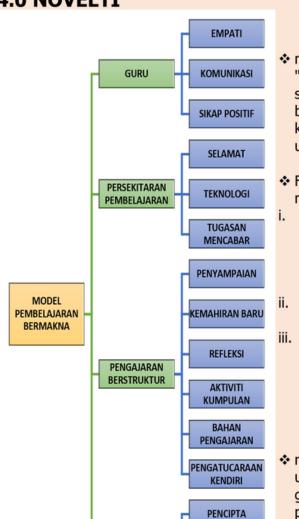
3.0 KEBOLEHGUNAAN

- Memberikan penekanan aspek nilai dan pembentukan sikap (afektif) seiring dengan aspek kefahaman (kognitif) dan kemahiran (psikomotor).
- Memberi peneguhan tentang aspek pengajaran dan pembelajaran yang mendokong kemenjadian insan yang seimbang dan sepadu.
- Memberi rujukan pantas untuk para pendidik merancang dan merekabentuk pengajaran berkesan yang dapat membantu pembelajaran bermakna.
- Boleh digunakan dalam dunia pendidikan, motivasi, pembangunan kendiri, kaunseling dan kekeluargaan.

6.0 PENCIPTA

- ❖ Noraishah P. Othman
- ❖ Mahfuzah Mohammed Zabidi
- ❖ Ahmad Rozaini Ali Hasan
- ❖ Norhapizah Mohd Burhan
- Ahmad Fakhrurrazi Mohammed Zabidi
- ❖ Siti Fairuz Sujak

4.0 NOVELTI



- mengangkat faktor "Keterhubungan" sebagai faktor teras baru yang sebelum ini kurang diberi fokus utama.
- Faktor keterhubungan melibatkan:
- aspek dalam hubungan dengan Tuhan, pendidikan, rakan-rakan, masyarakat dan alam
- ii. hubungan dengan diri (refleksi)
- iii. hubungan dengan bahan pelajaran untuk difahami maknanya dan dikembangkan dalam kehidupan sebenar.
- memperincikan 3 faktor utama iaitu personaliti guru, suasana pembelajaran dan pengajaran berstruktur untuk persiapan pendidik

5.0 POTENSI PENGKOMERSIALAN

KETERHUBUNGAN

Berpotensi untuk ditampilkan dalam bentuk kit atau modul untuk kegunaan dan panduan para pendidik.

DIRI

PEMBELAJARAN

- Berpotensi dikembangkan dalam bentuk jurnal pengajaran untuk rekod pendidik.
- Berpotensi diolah untuk dijadikan jurnal refleksi pembelajaran untuk para pelajar

Students' Perception on the Usage of Wordwall Application in Teaching and Learning of the Arabic Vocabulary

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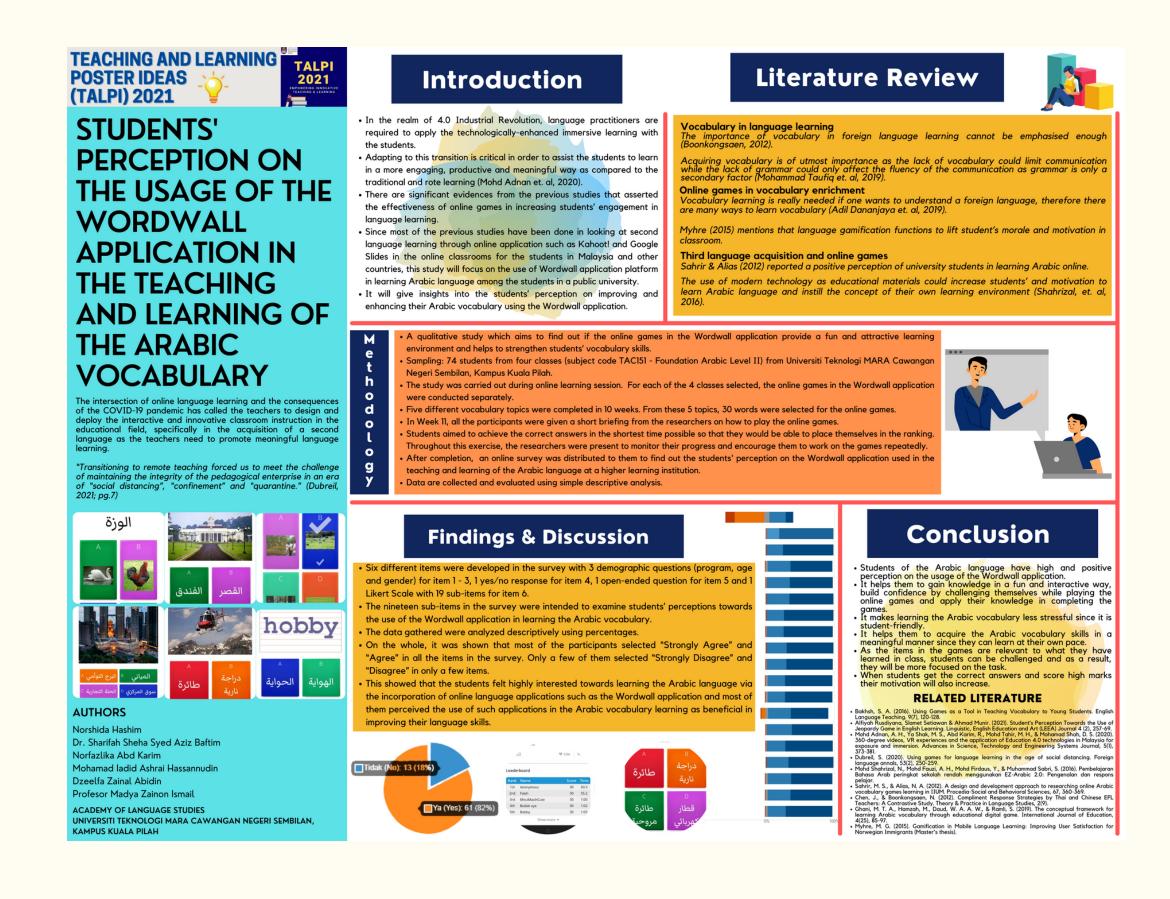
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Abstract

The 4.0 Industrial Revolution era has prepared the teachers to apply technologically-enhanced immersive learning with the students. Thus, they are constantly required to be creative and innovative in delivering quality instruction. In language learning, many different online strategies have been applied to facilitate students' language learning, especially in vocabulary skills which is one of the most basic areas to acquire as it is utilized in all the different language skills and it provides a better understanding of the language itself. In order to enhance vocabulary skills, there is significant evidence from the previous studies that asserted the effectiveness of online games which can increase students' engagement in language learning, relatively focused on writing, reading and speaking. Hence, this study will focus on the use of the Wordwall application platform in learning the Arabic language among students in a public university. The aim of the study is to investigate students' perception of the Wordwall application used in the teaching and learning of the Arabic language at a higher learning institution. Students played the online games and filled in a survey to find out if the online games in the Wordwall application provide a fun and attractive learning environment and help to strengthen students' vocabulary skills. The positive findings provide an extension of data related to second or third language acquisition research inside and outside Malaysia which focuses on Arabic vocabulary learning through Wordwall application. It is hoped that this study will give insights into the students' perception of improving and enhancing their Arabic vocabulary using the Wordwall application.

Keywords: Wordwall Application, language learning Arabic language

Students' Perception on the Usage of Wordwall Application in Teaching and Learning of the Arabic Vocabulary



Learning K-MAP with Colour Code

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Abstract

The Karnaugh Map or K-Map is a method of simplifying Boolean Algebra equations without having to use Boolean Algebra theorems. It uses human pattern-recognition capabilities to identify common variables. Considering the case of solving an equation using the minterm function, once the Karnaugh map has been constructed and the adjacent 1s linked by rectangular and square boxes, the algebraic minterm can be found by examining which variables stay the same within each box. Students find difficulty identifying a group of variables that are presented in the K-Map. By introducing color code patterns, students are able to identify the variables easier. Each input variable is assigned a color. Two symbols are used to indicate logic 1 and 0 for example symbols "^" and "/". The correct symbols using the correct colors are drawn inside each cell that sits on the rectangular and square boxes with have been drawn earlier. After finishing, students need to compare the pattern of the symbols that they have drawn. If both symbols with similar colors exist in two or more boxes in the group, the pattern would be removed, equivalent to simplifying the Boolean. The remaining symbols and colors will be translated back into their respective identifier to create the Boolean terms. This process will be repeated throughout the K-Map.

Keywords: Karnaugh Map, colour code, common variables

Learning K-MAP with Colour Code





LEARNING K-MAP WITH COLOUR CODE

ABSTRACT

The Karnaugh Map or K-Map is a method of simplifying Boolean Algebra equations without having to use Boolean Algebra theorems. It uses human's patternrecognition capabilities to identify common variables. Considering the case of solving an equation using minterm function, once the Karnaugh map has been constructed and the adjacent 1s linked by rectangular or square box, the algebraic minterm can be found by examining which variables stay the same within each box. Students find difficulty identifying group of variables that are presented in the K-Map. By introducing colour code pattern, students are able to identify the variables easier. Each input variables are assigned a colour. Two symbols are used to indicate logic 1 and 0 for example symbol "^" and "/". The correct symbols using the correct colours is drawn inside each cell that sits on the rectangular or square boxes with have been drawn earlier. After finished, students need to compare the pattern of the symbols that they have drawn. If both of the symbol with similar colour exist in two or more box in the group, the pattern would be removed, equivalent to simplifying the Boolean. The remaining symbols and colour will be translated back into their respective identifier to create the Boolean terms. This process will be repeated throughout the K-Map.

1.0 OBJECTIVES

 Improvise the learning process of Karnaugh Map

2.0 ADVANTAGES

- Easily implemented
- Visualization of the solution

3.0 USEFULNESS

 Assist students with difficulties identifying terms of expression

4.0 NOVELTY

A different approach to a longstanding method

5.0 COMMERCIALISATION POTENTIAL

· Not applicable

6.0 INVENTORS

- Nur Farahiah Binti Ibrahim
- Muhd Firdaus Bin Muhd Yusoff
- Dzufi Iszura Binti Ispawi
- Fatimatul Anis Binti Bakri

Education Innovation Using Interactive Notes in Teaching and Learning Office Software Applications for Non-IT Students

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Abstract

Learning Office Software Applications today has become one of the most important skills to be used for routine task within an organization, to simplify the function and increase productivity. The learning of this subject is compulsory for all students of Semester Four (4), Diploma in Office Management and Technology (BM118). This is an advanced course emphasizing knowledge, application and hands-on experience on current office technology and software. This course helps the learner to design and create simple databases, web pages, Gantt charts and desktop publishing activities. A lot of focus has been given to teaching Office Software Applications to non-IT (Information Technology) background students. With online teaching and learning becoming the norm for so many lecturers and students during the COVID-19 climate, it is important to be aware of what makes an engaging, creative, and effective web-based teaching and learning experience. The development of interactive notes using digital flipbook presenting engaging and creative online teaching and learning for Office Software Applications. Making the creative notes visually appealing and well organized helps our students stay motivated and makes our class sessions a lot more enjoyable. Plus, visually representing information has been proven to help students remember facts and figures. The use of digital flipbooks in teaching Office Software Applications increase student retention of information and concepts in the classroom. The results of the study show that overall, the interactions that occur in the Open Distance Learning (ODL) process using digital flipbook teaching materials are quite satisfying. The interactive notes enhance the learning process and lead to better knowledge retention.

Keywords: Interactive Notes, Office Software Applications, ODL

Education Innovation Using Interactive Notes in Teaching and Learning Office Software Applications for Non-IT Students





EDUCATION INNOVATION USING INTERACTIVE NOTES IN TEACHING AND LEARNING OFFICE SOFTWARE APPLICATIONS FOR NON-IT STUDENTS.

ABSTRACT

Learning Office Software Applications today has become one of the most important skills to be used for routine task within an organization, to simplify function and increase productivity. The learning of this subject is compulsory for all students of Semester Four (4), Diploma in Office Management and Technology (BM118). This is an advanced course emphasizing knowledge, application and hands-on experience on current office technology and software. This course helps the learner to design and create simple databases, web pages, Gantt chart and desktop publishing activities. A lot of focus has been given in teaching Office Software Applications to non-IT (Information Technology) background students. With online teaching and learning becoming the norm for so many lecturers and students during the COVID-19 climate, it is important to be aware of what makes an engaging, creative, and effective web-based teaching and learning experience. The development of interactive notes using digital flipbook presenting engaging and creative online teaching and learning for Office Software Applications. Making the creative notes visually appealing and well organized helps our students stay motivated and makes our class sessions a lot more enjoyable. Plus, visually representing information has been proven to help students remember facts and figures. The use of digital flipbooks in teaching Office Software Applications increase student retention of information and concepts in the classroom. The results of the study show that overall, the interactions that occur in the Open Distance Learning (ODL) process using digital flipbook teaching materials are quite satisfying. The interactive notes enhance the learning process and leads to better knowledge retention.

1.0 OBJECTIVES

- 1. To identify the method of teaching and learning IT to non-IT background students.
- 2. To develop a digital flipbook learning media by presenting engaging and creative online teaching and learning for Office Software Applications (OBM255)
- 3. To cultivate and encourage student centered learning experience.

2.0 ADVANTAGES

- Mobile friendly Flipbooks are responsive across all devices
- 2. Attractive to readers Interactive graphic design, more colorful, appealing, and eye-catching than printed materials
- 3. Best flipping effect The flipping effect has a "wow" factor that excites new readers

3.0 USEFULNESS

- 1. A flipbook is a digital publication that is formatted to look like a real publication with a page-turning effect, a shadow in the middle and even a page-flipping sound.
- 2. Flipbooks can easily be sent to the students via a simple, clickable link which opens the publication instantly.
- 3. Multimedia Integration just upload your video and integrate it into your flipbook software.

4.0 NOVELTY

- 1. The **first flipbook** presenting innovative and creative online teaching notes for Office Software Applications (OBM255)
- 2. This strategy also support student centered as compared to traditional learning system. The learner can plan their study and give the flexibility for them to access the material whenever and wherever they are.

5.0 COMMERCIALISATION POTENTIAL

- 1. Interactive media
- 2. Easy to edit and distribute
- 3. accessible across all devices
- 4. low-cost
- 5. creative teaching strategy to promote meaningful learning and student engagement

6.0 INVENTORS

Mrs Norafiza Mohd Hardi Ms Nurul Izzati Idrus Mrs Nurul Amira Azmi



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Connectivism Activity in Teaching and Learning (CATL): Pear Deck

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Abstract

In the last decade, the teaching and learning environment changed to provide flexibility and conveniences. Nevertheless, the education is shaken by the outbreak of Coronavirus (COVID 19) and resulted in unpreparedness from students and educators. In addition, the pandemic's dynamism pushed the government to undertake regular rule revisions resulting in constant changing Standard Operating Procedures (SOP) which affected the teaching and learning activities in Higher Learning Institutions. This situation has created a difficult situation in conducting classes that involve theory and practical classes including the culinary arts field where it requires the ability to perform and organize food preparation as culinary competencies can be seen as a molar concept similar to the concept of intelligence, with its major components being skills, judgment, attitudes and values, knowledge, ability and capacity (Hu, 2010, p. 2). Thus, a formulation of a teaching approach is introduced which helps improve students-lecturers' engagement and cognitive development in technical-based courses in an online setting. The originality of this approach is that the typical classes use slides and video for knowledge sharing in the technicalbased courses, however, this method is mainly focusing on one-way interaction, making teaching-learning unresponsive. Thus, by incorporating online teaching application apps such as Pear Deck. It helps to improve engagement between students and lecturers in technical courses. Besides, it makes learning fun and interactive. Incorporating existing online applications helps to improve students' performance with minimum cost whereby fun and interactive teaching and learning not only boost motivation to learn. It also contributes significantly to students' performance in assessment. The potential for commercialization for such an approach embedded in fun and interactive factors in technical courses is possible by using the existing online application. In the future, the approach can be extended to other courses and levels of education. Making education livelier and more interactive

Keywords: Teaching approach, connectivism activity, Pear Deck

Connectivism Activity in Teaching and Learning (CATL): Pear Deck

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



CONNECTIVISM ACTIVITY IN TEACHING AND LEARNING (CATL): PEAR DECK



Category: Professional

Type: Digital Technology in Teaching and Learning

ID: TALPI149B



Abstract

In the last decade, the teaching and learning environment changed to provide flexibility and conveniences. Nevertheless, the education is shaken by the outbreak of Coronavirus (COVID-19) and resulted in unpreparedness from students and educators. In addition, the pandemic's dynamism pushed the government to undertake regular rule revisions resulting in constantly changing Standard Operating Procedures (SOP) which affected the teaching and learning activities in Higher Learning Institutions. This created a difficult situation in conducting classes which involve theory and practical classes including the culinary arts field where it requires ability to perform and organize food preparation as culinary competencies can be seen as a molar concept similar to the concept of intelligence, with its major components being skills, judgment, attitudes and values, knowledge, ability and capacity (Hu, 2010, p. 2). Thus, a formulation of teaching approach is introduced which helps improve students-lecturers' engagement and cognitive development in technical based courses in an online setting. The originality of this approach is that the typical classes use slides and video for knowledge sharing in technical based courses, however this method is mainly focusing on one-way interaction, making teaching-learning unresponsive. Thus, by incorporating online teaching application apps such as Pear Deck. It helps to improve engagement between students and lecturers in technical courses. Besides, it makes learning fun and interactive. Incorporating existing online applications helps to improve students' performance with minimum cost whereby fun and interactive teaching and learning not only boost motivation to learn. It also contributes significantly to students' performance in assessment. The potential for commercialization for such an approach embedded in fun and interactive factors in technical courses is possible by using the existing online application. In the future, the approach can be extended to other courses and levels of education. Making education livelier and more interactive.

Objectives

- Helps improve students-lecturers engagement and cognitive development in culinary art (technical based course) in online setting.
- Promote connectivism of students-lecturers to gauge practical theories that seems impossible to be conducted in online setting.

Special Criteria

Incorporating existing online application help to improve students performance with minimum cost in the culinary arts online practical class.



Impact / Usefulness

Fun and interactive teaching and learning not only boost motivation to learn. It also contributes significantly to students performance in assessment.

Advantages

The typical classes use slides and video for knowledge sharing in technical based courses. This method is mainly focusing on one-way interaction, making teaching-learning unresponsive. Thus, by incorporating online teaching application apps such as Pear Deck. It helps to improve engagement between students and lecturers in technical courses. Besides, it also makes learning fun and interactive.

Commercialisation Potential

Embedding fun and interactive factor in culinary arts practical class is possible by using the existing online application. In the future, the approach can be extended to other courses and level of education. Making education alive and interactive.

Inventors:

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Membangunkan Graf Rantaian Perawi Hadis Melalui Aplikasi Laman Web Terhadap Hadis Terpilih di dalam Sahih Muslim

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Abstract

Perkembangan Revolusi Perindustrian Keempat (4IR) dan normal baharu pada era pandemik menjadikan internet sebagai salah satu medium penting dalam melaksanakan aktiviti pengajaran dan pembelajaran. Ia merangkumi pelbagai bidang pengajian termasuklah ilmu hadis yang merupakan sebahagian daripada bidang pengajian Islam. Penggunaan ICT terutama aplikasi laman web dalam pembelajaran hadis adalah sebuah platform untuk menyampaikan ilmu hadis dalam suasana pembelajaran Open Distance Learning (ODL) agar ilmu yang disampaikan dapat difahami oleh para pelajar dengan jelas. Tujuan utama kajian ini adalah untuk membangunkan graf rantaian perawi hadis dengan mengaplikasikan model teori graf. Melalui laman web yang dibangunkan, graf tersebut akan dipaparkan bagi memudahkan pelajar untuk mempelajari kaedah menghasilkan graf rantaian perawi hadis melalui hadis-hadis terpilih dari kitab Sahih Muslim. Hasil kajian menunjukkan bahawa graf rantaian perawi hadis dapat dihasilkan dan memudahkan proses pengajaran dan pembelajaran dengan lebih lancar. Kajian ini merupakan kajian awal bagi hadis terpilih yang kurang kompleks, dan laman web yang dibina akan meliputi hadis yang lebih kompleks dalam kajian yang akan datang.

Kata Kunci: Graf Rantaian Perawi Hadis, hadis-hadis , pembelajaran

Membangunkan Graf Rantaian Perawi Hadis Melalui Aplikasi Laman Web Terhadap Hadis Terpilih di dalam Sahih Muslim

KEBAIKAN NOVELTI KEPENTINGAN Kebanyakan ulama menekankan pembinaan Terdapat banyak aplikasi web pohon hadis adalah asas kepada ilmu yang dibangunkan untuk al-Madīth dalam menentukan menyebarkan ilmu hadis dari kesahihan sesuatu hadis melalui perawi yang pelbagai kitab. boleh dipercayai Namun, kebanyakan aplikasi Pelajar boleh mengkaji kesan penggunaan web tidak tersebut symbol khas iaitu Ha dan Wa yang boleh menyediakan visual didapati didalam kitab Sahih Muslim persembahan rantaian perawi Penggunaan teknologi ICT melalui algoritma hadis bermula dari Rasulullah tertentu boleh menghasil visual rantaian SAW kepada perawi terkenal perawi hadis seperti Imam muslim. **VISUAL EFISIEN** MENDALAMI Memberi gambaran tentang kepentingan **OBJEKTIF** mendalami ilmu Takhrīj al-Madīth melalui penggunaan aplikasi web dalam melaksanakan aktiviti pengajaran dan pembelajaran ilmu **PELUANG PENGKORMERSIAL** Menyediakan ruang iklan untuk produk islamik yang sesuai dengan peringkat umur pelajar atau tenaga pengajar hadis samada dari dalam atau luar **ABSTRAK** Hasil daripada pembangunan graf Perkembangan Revolusi rantaian perawi hadis, graf tersebut Perindustrian Keempat (4IR) dan akan dipaparkan didalam aplikasi pandemic covid-19 web yang dibangunkan bagi menjadikan internet sebagai platform memudahkan pelajar pensyarah melaksanakan mempelajari kaedah menghasilkan untuk dan graf rantaian perawi hadis melalui aktiviti pengajaran pelajar. hadis - hadis terpilih dari kitab imam pembelajaran dengan Penggunaan teknologi muslim. Hasil daripada penyelidikan terutamanya aplikasi web dalam ini, graf rantaian perawi hadis dapat pembelajaran hadis adalah satu dihasilkan melalui pengunaan model keperluan untuk menyampaikan ilmu teori graf. Namun, graf rantaian MEMBANTU hadis dalam suasana pembelajaran perawi hadis dapat dihasilkan pada Membangunkan aplikasi web Open Distance Learning (ODL) agar beberapa hadis yang kurang dalam membantu pelajar ilmu yang disampaikan dapat kompleks. Untuk penyelidikan yang pelajar untuk memahami difahami oleh para pelajar dengan akan datang, pembangunan graf perawi dalam susunan jelas. Tujuan utama penyelidikan ini rantaian perawi hadis akan sesuatu hadis dan senarai adalah untuk membangunkan graf dikhususkan kepada hadis yang lebih sanad akan dipersembahkan rantaian perawi hadis dengan kompleks melalui model yang lebih sesebuah pohon mengaplikasikan model teori graf. sesuai. **MENERANGKAN** Penerangkan proses langkah langkah membangunkan pohon hadis dari kitab sahih Muslim untuk dipaparkan di aplikasi web supaya dapat difahami oleh Rantaian Perawi OHadis pelajar dalam suasana (pembelajaran secara atas Graf Rantaian perawi hadis melalui Aplikas INVENTOR Penyelidik adalah dari tenaga pengajar di KUIS, USIM dan UiTM Perisian Kursus Pemetaan Syajarat al- Asanid Dalam Sahih Muslim

GPM :(Geran Penyelidikan Pertengahan)
No Kod Penyelidikan :KUIS/2019/ GPIK-29/GPM/01

Saadah Hamisan @Khair | Siti Azwanie Che Omo

Dr. Phayilah Yama (K) | Siti Mursyidah Mohd Zin | Aisyah Mat Jasin | Muhammad Aizat Syimir Rozani | N

AHLI PENYELIDIKAN

Menggunakan Aplikasi Berasaskan Web

e-Classroom management: Are we ready enough?

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Abstract

Teaching students virtually can be intimidating for many educators. Factors such as the educators' readiness and competency in utilizing technology to teach online are intuitive. However, due to the COVID-19 pandemic, online teaching is no longer an alternative teaching delivery mode for educators around the world. The education system needed to implement the option and educational institutions had to take the risks in providing the opportunities for educators to learn to teach their courses entirely online. Some educators have been technically trained by their institution, hence were experienced with a range of online (e-)learning resources and management systems before 2020. In general, however, educators have made the necessary adjustments. These adjustments include innovative teaching strategies to increase students-educators performances while learning to teach online. This study proposes a brief step-by-step e-classroom instructional guideline using a flowchart manifesting the preparation before class; the strategies from the beginning to the end of the class; and communication after the class for responses. This innovation features components including a range of instructional strategies for e-teaching in developing countries during the pandemic; and educators' views that minimized the negative connotations of risk-taking and making mistakes during the transition period from traditional inclass to e-class following the pandemic. The proposed flowchart is designed to prepare less experienced educators in managing e-classrooms in order to reduce their anxiety and to induce students-educators' interactions for effective learning during and post-pandemic.

Keywords: Online teaching, e-classroom management, interactive teaching strategy and activities, instructional strategies

e-Classroom management: Are we ready enough?



e-Classroom management: Are we ready enough? by Mahayaudin M. Mansor, PhD

Poster submitted for participation in the Teaching and Learning Poster Ideas (TALPI) 2021 Virtual Competition

Empowering Innovative Teaching & Learning (Non-tech Teaching & Learning Methods)"

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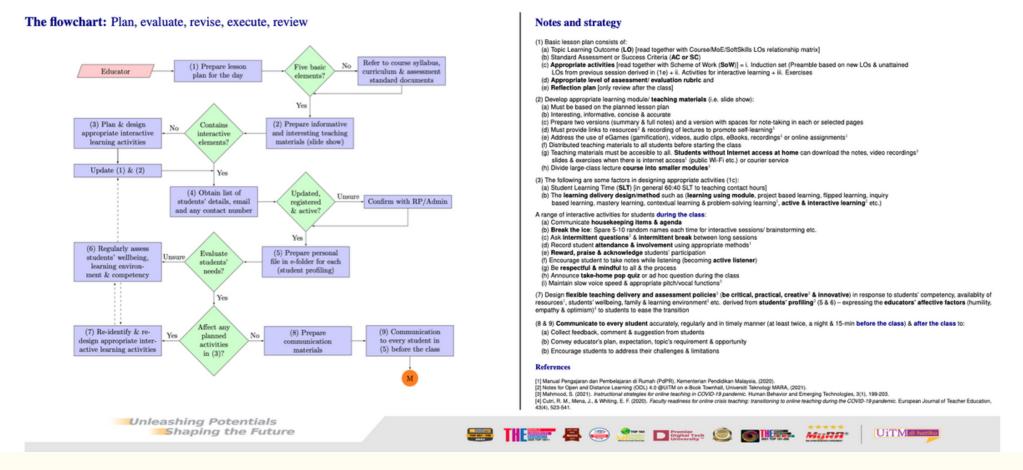
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Abstract

Teaching students virtually can be intimidating for many educators. Factors such as the educators' readiness and competency in utilising technology to teach online are intuitive. However, due to the COVID-19 pandemic, online teaching is no longer an alternative teaching delivery mode for educators around the world. The education system needed to implement the option and educational institutions had to take the risks in providing the opportunities for educators to teach their courses entirely online. Some educators have been technically trained by their institution, hence were experienced with a range of online (e-)learning resources and management systems before 2020. In general however, educators have made the necessary adjustments'. These adjustments include innovative teaching strategies to increase students-educators performances while learning to teach online. This study proposes a brief step-y-step e-classroom instructional guideline using a flowchart manifesting the preparation before starting the class, notes and strategies during, and communication after the class for responses. This innovation features a range of instructional strategies for e-teaching in developing countries during the pandemic; and educators' views that minimised the negative connotations of risk-taking and making mistakes during transition period from traditional in-class to e-class following the pandemic. The proposed flowchart is designed to prepare less experienced educators in managing e-classrooms in order to reduce their anxiety and to induce students-educators' interactions for effective learning during and post-pendemic.

Keywords: Online teaching, e-classroom management, teaching guideline, interactive teaching strategy and activities, instructional strategies, pandemic



EZY-Letter Gamification: Gamification and Levels of Processing Based Learning Tool to Increase Student's Memorisation Ability

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Abstract

There are many types of letters are in use in operating a business. Different types of letters come with different formats and purposes. The higher educational institution has included letter writing as part of the syllabus in order to prepare the students for a real working environment. Some students have problems memorizing different formats of letters. This situation not only affects their examination result but might affect their working performance in the real world due to different situations requiring them to use different formats of letters. Incongruent with this problem, this paper intends to explore the integration between the Gamification concept and Levels of Processing Model by Craik & Lockhart to increase the student's ability to memorize letter writing formats in a simple, easy, yet interesting way as many students like to play game. This paper develops a digital game that implements the elements in the Levels of Processing Model which includes structure (visual), phonetic (audio) and semantic (mean) that can lead to long-term memory. This game is tested on students that take a subject where letter writing is part of the syllabus. Points, badges and leaderboards are among the reward elements in the game. Later, the students are tested to write different formats of letters without any help from the game. This can increase students' interest and participation while increasing their ability to memorize the format of the letters. This can also be applied not only to students but also to workers in organizations in order to help them memorize format of letters in simple, easy and interestin

Kata Kunci: UjiaEZY-Letter Gamification, memorisation, Gamification concept

EZY-Letter Gamification: Gamification and Levels of Processing Based Learning Tool to Increase Student's Memorisation Ability



The O&G Made Easy

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Abstract

The "O&G made easy" was developed to help the educators and learners to obtain current information on obstetrics and gynecology information. The resources in the "O.N.G it's just for you" is now being made available on the YouTube channel for online access, and USB Memory Stick and CD for offline access, it is presenting the first stage in the program and cover several important topics and further resources will be added in subsequent distributions. The content of the "O.N.G it's just for you" is a specialized obstetrics and gynecology course with written materials, video lectures, quizzes, and self-tests (with answers). This content has been developed by expert lecturers in the area concerned and the contents have been integrated with the Ministry of Health curriculum. The contents have been divided into two areas, namely obstetrics and gynecology. There are ten big topics under obstetrics and there are seven big topics under gynecology topic. How to utilize the product: Educators and learners can watch the lectures and read the written materials, attempt the included assignments, and then use the self-tests to evaluate their learning performance. The educators and learners also can freely download the materials after registering for the program. Access to the materials would be restricted and only available to those who are registered to the program. The "O&G made easy" is designed to provide freely available, quality academic and instructional materials for obstetrics and gynecology trainers/professors, professionals, and students to complement and enhance the obstetrics and gynecology curriculum, with or without the need for internet access or high bandwidth.

Keywords: obstetrics, gynecology, online teaching, and online material

The O&G Made Easy

TEACHING AND LEARNING POSTER IDEAS (TALPI) 2021



THE O&G MADE EASY **ABSTRACT**

The "O&G made easy" was developed to help the educators and learners to obtain current information on the obstetrics and gynecology information. The resources in the "O&G it's just for you" is now being made available on the YouTube channel for online access, and USB Memory Stick and CD for offline access, it is presenting the first stage in the program and cover several important topics and further resources will be added in subsequent distributions. The content of the "O&G it's just for you" is a specialized on the obstetrics and gynecology course with written materials, video lectures, quizzes, and self-tests (with answers). This content has been developed by expert lecturers in the area concern and the contents have been integrated with the Ministry of Health curriculum. The contents have divided into two area, namely obstetrics and gynecology. There are ten big topics under obstetrics and there are seven big topics under gynecology topic. How to utilize the product: Educators and learners can watch the lectures and read the written materials, attempt the included assignments, and then use the self-tests to evaluate their learning performance. The educators and learners also can freely download the materials after registered to the program. Access to the materials would be restricted and only available to those who are registered to the program. The "O&G made easy" is designed to provide freely available, quality academic and instructional materials for obstetrics and gynecology trainers/professors, professionals, and students to complement and enhance the obstetrics and gynecology curriculum, with or without the need for internet access or high bandwidth.

OBJECTIVE

- To provide an interesting and interactive online and offline learning and teaching
- To provide an easy access to the learning materials related to obstetric and gynecology in nursing

ADVANTAGES

- Provides online and offline access to the materials
- Online user click the shared link or QR code
- Offline user register and will receive one USB Memory Sticks or CD that consist of the information on the product.

USEFULLNESS

- As a quick reference &pre reading for students in doing their revision
- Students also can evaluate their understanding by joining the provided quizzes & games



This product is the online and offline access.

The contents of the product can be exported in various types of files





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ECADD Learning for POLYCC

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Abstrak

Reka Bentuk Berbantu Komputer atau Computer Aided Design (CAD) merupakan perisian komputer dalam pembinaan model serta reka bentuk dimensi 2D atau 3D. Perisian ini banyak digunapakai dalam sektor kejuruteraan awam, senibina, landskap, mekanikal dan elektrik. Bagi pelajar kejuruteraan, CAD merupakan antara kursus penting yang perlu dipelajari sebelum melangkah ke alam kerjaya. Untuk lebih menguasainya, pelajar perlu pembelajaran kendiri selepas kuliah di dalam makmal komputer. Tambahan dalam konteks COVID-19 yang membataskan pertemuan bersemuka antara pelajar dan pensyarah. Justeru, sebuah laman web telah dibangunkan untuk membolehkan pelajar mempelajari perisian CAD secara lebih komprehensif. Laman web ini menerangkan langkah demi langkah untuk mempelajari komponen draw, modify, annotation, layers, blocks, properties, groups, command, dan lain-lain. Selain berguna untuk pelajar Politeknik dan Kolej Komuniti seluruh Malaysia, laman web ini juga boleh diakses oleh pensyarah dan orang awam yang berminat untuk mempelajari perisian seperti pembantu jurutera, jurutera, pelukis pelan, juruukur tanah dan mereka yang terlibat dalam sektor pembinaan. Proses reka bentuk ini menggunakan model proses reka bentuk Hudson dan Fraser (2005) yang mencakupi elemen pengenalpastian masalah, penyelidikan, penjanaan idea, pemilihan perincian, membuat solusi dan penilaian. Konsep pembinaan laman web ini adalah berteraskan Content Management System (CMS) yang lebih mudah dikendalikan berbanding Joomla!, Magento, Prestashop atau Drupal. Setelah pembelian domain dan hosting serta dibekalkan dengan cPanel, proses memuat turun perisian dilaksanakan dalam Softaculous Apps Installer. Reka bentuk laman web ini dibangunkan berteraskan pembinaan kehendak Web 2.0 yang sarat dengan elemen grafik, audio, visual yang memenuhi ciri-ciri pembelajaran gaya moden yang boleh diakses di mana-mana dan bila-bila masa sahaja.

Kata Kunci: Computer Aided Design (CAD), pelajar kejuteraan, politeknik dan kolej komuniti

ECADD Learning for POLYCC



E-Comfest Virtual Event Framework Using ASDIT Approach: Visible to Virtual Experience

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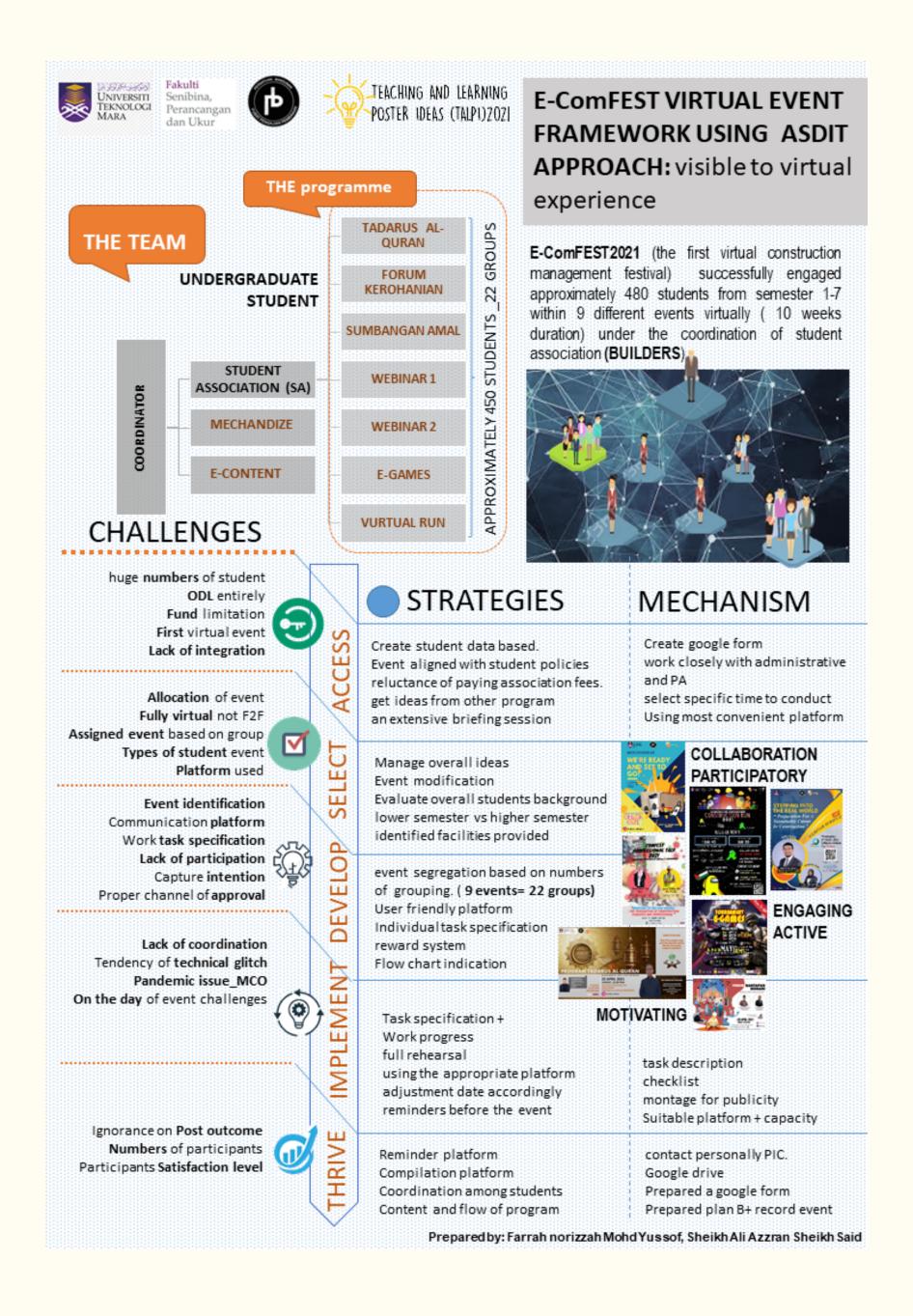
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Abstract

The COVID-19 pandemic has brought a great impact globally, causing unique educational, economic and social challenges. There are more than 50,000 tertiary colleges, universities and institutes worldwide serving 200 to 300 million students and communities. The impact of the pandemic forces the institutions to find ways to continue the learning and development process to preserve efforts and enhance student learning development without jeopardizing the entire learning process for the benefit of students, academics, administrative staff and support staff to meet student needs. In order to ensure the level of knowledge as well as a social skill among students been emphasis during COVID-19, the Construction Management program Universiti Teknologi MARA (UiTM) has put an effort by conducting the first virtual construction management festival named e-ComFEST 2021. Approximately 480 students from semester 1-7 within 9 different events virtually (10 weeks duration) were involved under the coordination of student association (BUILDERS). The various event was critically planned and developed by taking various factors and aspects into consideration such as forum, tadarus al-Quran during Ramadhan, charity program, academic webinar series, e-games, virtual run and others. In order to absorb the various challenges through the semester especially faced during the pandemic, ASDIT framework was used by considering various strategies and mechanisms. The description was based on real student activities conducted which it gave an insight into how the student's activities were able to be done during the COVID-19 pandemic and proved the activities are feasible and viable to be completed with minimal risk.

Keywords: e-ComFEST, Construction management programme, ASDIT framework

E-Comfest Virtual Event Framework Using ASDIT Approach: Visible to Virtual Experience



Rumah Tukar

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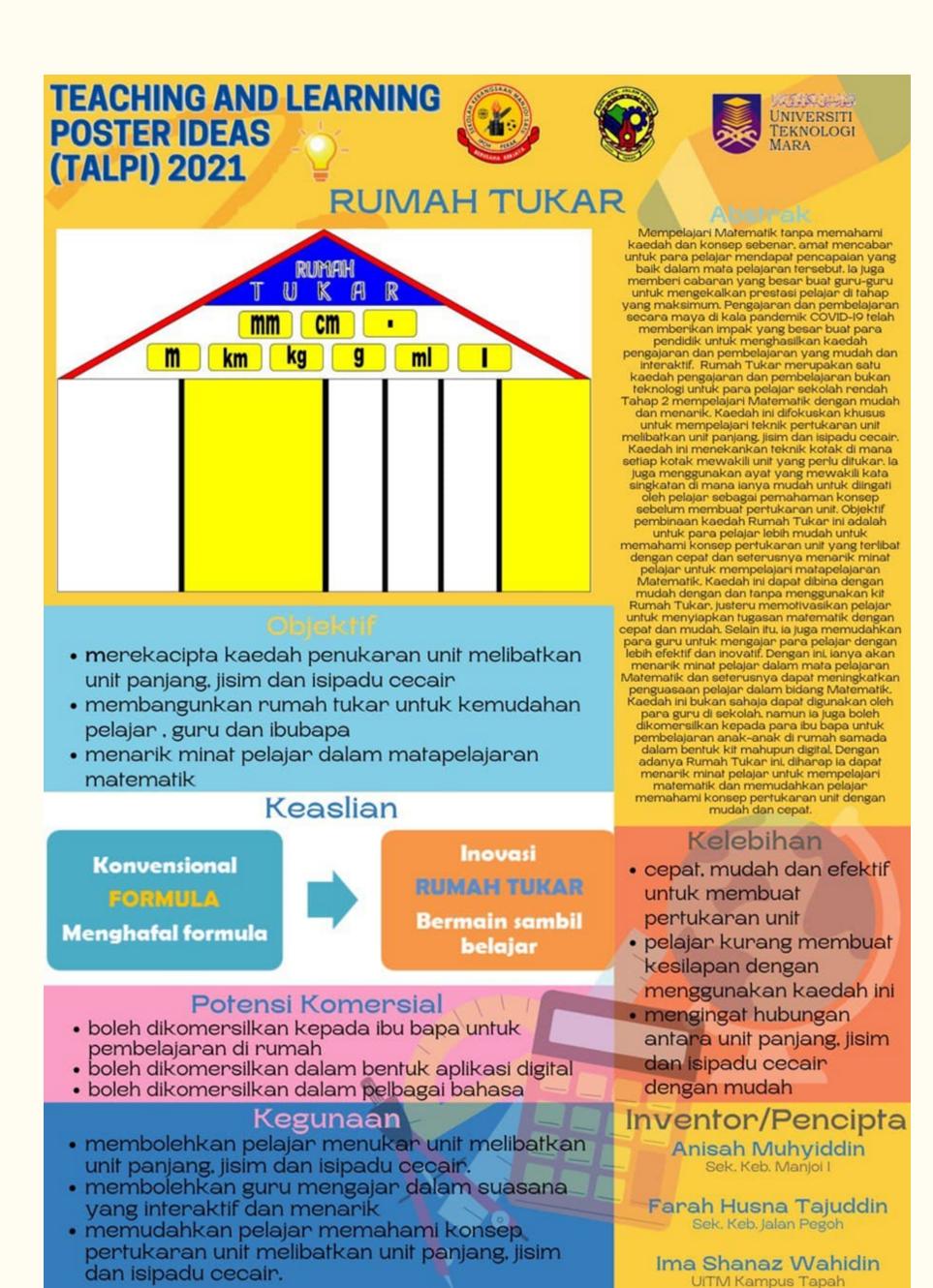
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Abstrak

Mempelajari Matematik tanpa memahami kaedah dan konsep sebenar, amat mencabar untuk para pelajar mendapat pencapaian yang baik dalam mata pelajaran tersebut. Ia juga memberi cabaran yang besar buat guruguru untuk mengekalkan prestasi pelajar di tahap yang maksimum. Pengajaran dan pembelajaran secara maya di kala pandemik COVID-19 telah memberikan impak yang besar buat para pendidik untuk menghasilkan kaedah pengajaran dan pembelajaran yang mudah dan interaktif. Rumah Tukar merupakan satu kaedah pengajaran dan pembelajaran bukan teknologi untuk para pelajar sekolah rendah Tahap 2 mempelajari Matematik dengan mudah dan menarik. Kaedah ini difokuskan khusus untuk mempelajari teknik pertukaran unit melibatkan unit panjang, jisim dan isipadu cecair. Kaedah ini menekankan teknik kotak di mana setiap kotak mewakili unit yang perlu ditukar. Ia juga menggunakan ayat yang mewakili kata singkatan di mana ianya mudah untuk diingati oleh pelajar sebagai pemahaman konsep sebelum membuat pertukaran unit. Objektif pembinaan kaedah Rumah Tukar ini adalah untuk para pelajar lebih mudah untuk memahami konsep pertukaran unit yang terlibat dengan cepat dan seterusnya menarik minat pelajar untuk mempelajari matapelajaran Matematik. Kaedah ini dapat dibina dengan mudah dengan dan tanpa menggunakan kit Rumah Tukar, justeru memotivasikan pelajar untuk menyiapkan tugasan matematik dengan cepat dan mudah. Selain itu, ia juga memudahkan para guru untuk mengajar para pelajar dengan lebih efektif dan inovatif. Dengan ini, ianya akan menarik minat pelajar dalam mata pelajaran Matematik dan seterusnya dapat meningkatkan penguasaan pelajar dalam bidang Matematik. Kaedah ini bukan sahaja dapat digunakan oleh para guru di sekolah, namun ia juga boleh dikomersilkan kepada para ibu bapa untuk pembelajaran anak-anak di rumah samada dalam bentuk kit mahupun digital, Dengan adanya Rumah Tukar ini, diharap ia dapat menarik minat pelajar untuk mempelajari matematik.

Kata Kunci: Rumah Tukar, Matematik, pelajar sekolah rendah

Rumah Tukar



ESL Learners' Perceptions on Group Discussion Tasks in Developing Their Speaking Ability

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Abstract

Group discussion tasks are essential and still relevant in evaluating learners' speaking abilities. The setback is learners who have been involved in numerous group discussions are not mindful of the skills used when they are discussing. In fact, not being able to acknowledge the powerful tool group discussion can offer makes students unable to perform well in oral exams, participate in professional contexts and develop their speaking ability. This study involved 100 undergraduate first-year students who have taken a speaking English course to look at their perceptions after they have completed group discussion tasks. It is to gauge their perceptions on the group discussion skills learned via recorded discussion, portfolio, and assessment. A questionnaire was provided using google form, and the results revealed that the majority of students have equipped themselves with the group discussion skills through the group discussion tasks given and are able to utilize the skills in other oral assessments as well as gradually develop their confidence and speaking ability. These perceptions are integral to knowing the effectiveness and practicality of the course to students in developing their speaking skills and to further improve the content of the speaking course.

Keywords: ESL learners' perceptions, group discussion tasks, speaking ability

ESL Learners' Perceptions on Group Discussion Tasks in Developing Their Speaking Ability





ABSTRACT

ESL LEARNERS' PERCEPTIONS ON GROUP DISCUSSION TASKS IN DEVELOPING THEIR SPEAKING ABILITY

Group discussion (GD) tasks are essential and still relevant in evaluating leaners' speaking ability. The setback is learners who have involved in numerous group discussion are not mindful of the skills used when they are discussing. In fact, by not being able to acknowledge the powerful tool group discussion can offer makes students unable to perform well in oral exams, participate in professional contexts and develop their speaking ability. This study involved 100 undergraduate first year students who have taken a speaking English course to look at their perceptions after they have completed group discussion tasks. It is to gauge their perceptions on the group discussion skills learnt via recorded discussion, portfolio, and assessment. A questionnaire was provided using google form, and the results revealed that majority of students have equipped themselves with the group discussion skills through the group discussion tasks given and are able to utilise the skills in other oral assessments as well as gradually developing their confidence and speaking ability. These perceptions are integral to know the effectiveness and practicality of the course to students in developing their speaking skills, and to further improve the content of the speaking course.

Keywords: ESL learners, perceptions, group discussion tasks, speaking ability

1.0 OBJECTIVES

- To know their overall perceptions on the group discussion (GD) tasks given.
- To know the effectiveness of the GD tasks to learners.
 To know whether they would be able to apply the group discussion skills acquired in other oral assessments.

3.0 USEFULNESS

- Teachers get to know that they have achieved the objectives of the course through the learners' perceptions.
- Teachers also get to identify their students' ability based on the tasks given and improve the course based on the learners' perceptions.
- Learners are mindful of what they have learnt and able to apply them in other speaking contexts.
 Learners are able to develop their speaking ability through these
- Learners are able to develop their speaking ability through these GD tasks.

4.0 NOVELTY

- GD Tasks authentic GD videos of students, transcriptions of their GD, GD reading report, GD self-critique report, standardisation of marking and familiarisation of topics based of students' field of study
- Learning methods self evaluation, discussion & group work
 Teaching strategies standardised teaching materials, assessment & evaluation

5.0 COMMERCIALISATION POTENTIAL

- > Teacher's guide in a speaking course
- Material development effective lesson plan
- Training materials for speaking
 Speaking assessment guide

6.0 PRESENTER

Nur Hazimah binti Nor Hashim (CALC, UPM)

REFERENCE

Al Javad, A. S. H. & Abornan, S. H. (2020). The Impact of Using Small Group Discussion Technique on Enhancing Students' Performance in Speaking Skills: A case study of Benghasi University, International Journal of Linguistics, Literature and Translation, 3 [7], 189-166. https://doi.org/10.32995/ijit.2020.3.7.31

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2.0 HOW GD TASKS ARE IMPLEMENTED

Learn the topic of GD Skills
Opening a discussion
Maintaining a discussion
Closing a discussion

2. Watch a YouTube video to familiarise with language expressions used in a GD

familiarise with language expressions used in a GD

Transcribe their GD base on the

Watch an authentic GD ssessment video & students must valuate the speakers' performance ased on GD rating from given

5. Further practice in the classroom/ e-classroom and briefing session to teachers

improvement Teachers are briefed to ensure

standardisation of marking

6. Conduct GD Assessment
 Teacher has divided students in group of five
 Theme is given a week prior to the assessment for them to read up
 Theme is related to their field of child such as science, social



Feedback is given for

7. Feedback is given to each group for further improvement

up 🖊

ADVANTAGES

- Learners are mindful of the stages and language expressions used
- Learners can evaluate their strengths and weaknesses through the execution of GD Portfolio.
- Learners are able to perform well in GD Assessment when watching an authentic video of previous GD assessment and utilise the GD skills' knowledge in other oral situations.
- Learners are no longer fear of GD and have confident when discussing as they go through several practices in the classroom.
- Learners are able to discuss effectively due to the familiarisation of the topic, and able to perform well due to sufficient preparation given.