



**PROCEEDING**

# **e-PICCESS 2021**

**e-Penang International Conference of Education and Social Science**

**7 - 9 SEPTEMBER 2021**

**SCHOOL OF EDUCATIONAL STUDIES  
UNIVERSITI SAINS MALAYSIA**

## ***Foreword***

Professor Dr. Hairul Nizam Ismail  
Advisor of e-PICCESS 2021 & Dean  
School of Educational Studies (PPIP-USM)

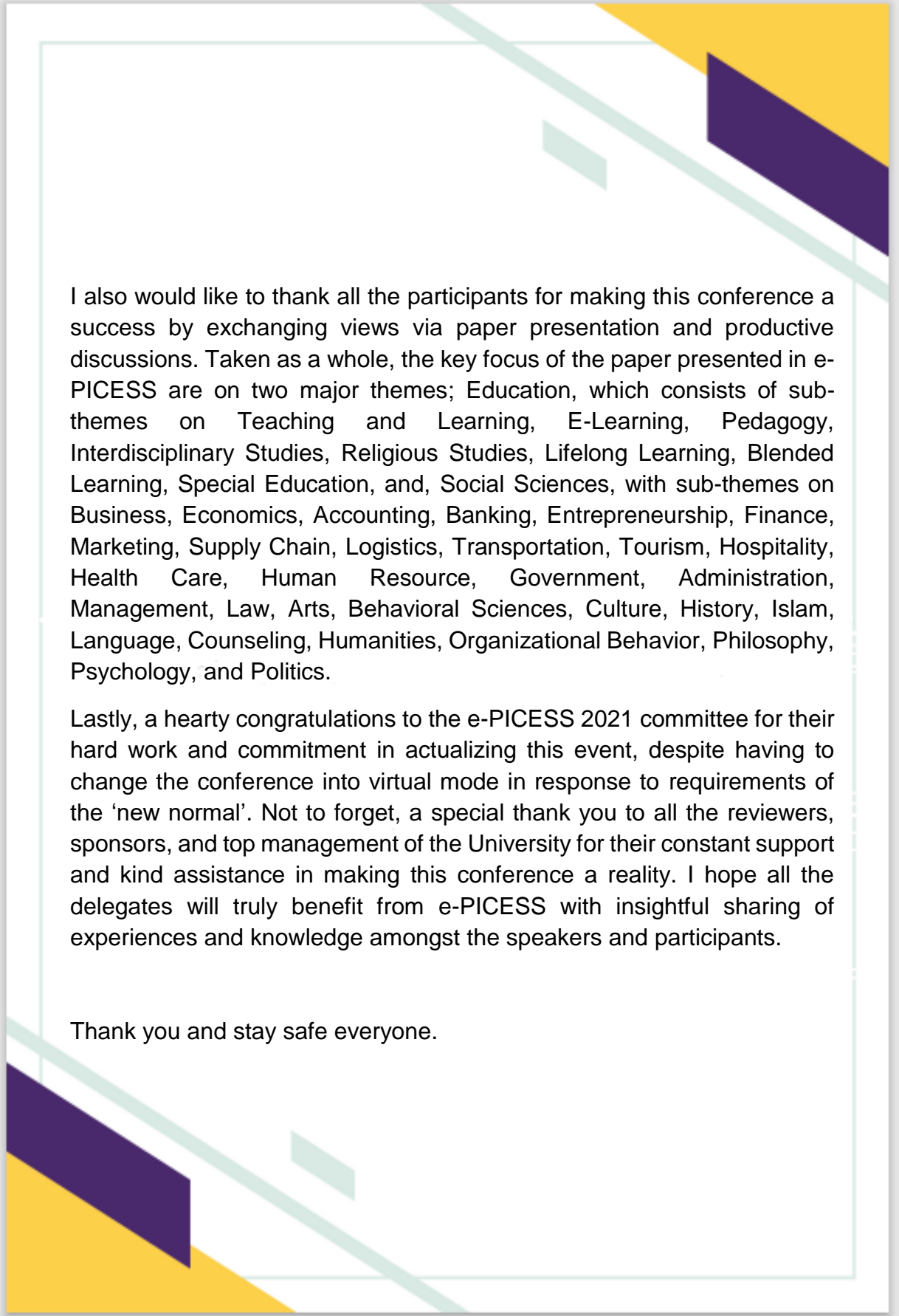


Warm greetings from School of Educational Studies, Universiti Sains Malaysia, (PPIP-USM),

On behalf of PPIP-USM, I would like to extend my welcome to all the delegates of the first Penang International Conference on Education and Social Sciences 2021 (e- PICCESS 2021), which is held virtually on 7th September from Penang, Malaysia. This is the first e-PICCESS event organized by PPIP-USM to provide a platform for academicians, scholars, and researchers to share their knowledge and ideas as well as to discuss current development in their respective fields with local and international participants.

It is also a great honor for us, in PPIP-USM, to have collaboration from Universitas Mularwarman, Indonesia and Universiti Islam Sultan Sharif Ali, UNISSA, Brunei. This collaboration I believe, will further expand our minds and intellect beyond borders.

I truly appreciate all the invited speakers of E- PICCESS 2021 who are spending their precious time participating in this event to share their insightful perspectives and experiences. Hopefully, their views will spark exciting discussions on issues surrounding the e- PICCESS theme, "It's the New Normal!" I anticipate that this event will shed light on the new normal in education and social science fields, both locally and internationally.



I also would like to thank all the participants for making this conference a success by exchanging views via paper presentation and productive discussions. Taken as a whole, the key focus of the paper presented in e-PICCESS are on two major themes; Education, which consists of sub-themes on Teaching and Learning, E-Learning, Pedagogy, Interdisciplinary Studies, Religious Studies, Lifelong Learning, Blended Learning, Special Education, and, Social Sciences, with sub-themes on Business, Economics, Accounting, Banking, Entrepreneurship, Finance, Marketing, Supply Chain, Logistics, Transportation, Tourism, Hospitality, Health Care, Human Resource, Government, Administration, Management, Law, Arts, Behavioral Sciences, Culture, History, Islam, Language, Counseling, Humanities, Organizational Behavior, Philosophy, Psychology, and Politics.

Lastly, a hearty congratulations to the e-PICCESS 2021 committee for their hard work and commitment in actualizing this event, despite having to change the conference into virtual mode in response to requirements of the 'new normal'. Not to forget, a special thank you to all the reviewers, sponsors, and top management of the University for their constant support and kind assistance in making this conference a reality. I hope all the delegates will truly benefit from e-PICCESS with insightful sharing of experiences and knowledge amongst the speakers and participants.

Thank you and stay safe everyone.

## Du'a

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ  
الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ  
وَالصَّلَاةُ وَالسَّلَامُ عَلَى أَشْرَفِ الْأَنْبِيَاءِ وَالْمُرْسَلِينَ  
وَعَلَى آلِهِ وَصَحْبِهِ أَجْمَعِينَ

### Ya Allah ya rahim

Praise be to GOD the Lord of the Worlds, peace and blessings be upon our Prophet Muhammad SAW And his companions and for those who followed his example till the judgment day.

### Ya Allah ya rahim

We seek the forgiveness of you, Allah and repent to You. You are Forgiving and loving, forgive us.

### Allah Huma ya Allah

On this blessed morning, in conjunction with the Penang International Conference on Education and Social Sciences 2021 (e- PICESS 2021), we beseech thee and grateful towards you in favor of all the infinite blessings to us, your humble servant, to live in safe and prosperous life. We seek your blessing for a flawless progress of this event from the beginning till the end. We seek your guidance to steer clear of event that would detrimental the progress of this event.

### **Ya Latif Ya Rahman**

Please bless us with your taufiq and hidayat, please guide University Sains Malaysia to greatness, peace, glory and prosperity in this world and the hereafter. Make us a responsible intellectual. Granted us with a valuable knowledge that will be beneficial to mankind in order to gain your mardha'tillah. Make us your righteous servant that followed your commands and neglect the sinful act. Please forgive us for our wrongdoing.

### **Ya Munzilal Barakat**

Bestow peace to our beloved country, Malaysia. Preserve us from any threat and disaster, neither man-made nor natural disaster. And, to you Ya ALLAH we ask for security and prosperity upon us, our leaders and our country. Bestow patience in us, in order to faces the challenges from you. Please accept our deeds and please reward us accordingly.

رَبَّنَا آتِنَا فِي الدُّنْيَا حَسَنَةً وَفِي الْآخِرَةِ حَسَنَةً وَقِنَا عَذَابَ النَّارِ  
وَصَلَّى اللهُ عَلَى مُحَمَّدٍ وَعَلَى آلِهِ وَصَحْبِهِ وَسَلَّمَ ، وَالْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ

## **Conference Organising Committee**

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**Certificate**

Nawwar Fairuz Sariffuddin

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**Techninal Team**

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## CONFERENCE SCHEDULE E-PICCESS

Main Event & Keynote Speaker	
Time	Event
8.30am – 8.45am	<b>Online Registration</b>
9.00am-9.30am	<b>Opening Ceremony starts</b> - National Song ( <i>NEGARAKU</i> ) & Menara Ilmu Song - USM Video Coporate - Du'a Recitation - Welcoming speech by: <b>Professor Dr. Hairul Nizam Ismail</b> <i>Dean School of Educational Studies (PPIP-USM)</i>
9.30am	<b>Keynote Speech by:</b> <b>Prof. Dr. H. Muhammad Amir Masruhim, M.Kes.</b> (Dekan FKIP Universitas Mulawarman)



<b>Parallel Session (ROOM 1)</b>		
<b>Moderator: Kaswina Ratakrishnan &amp; Sheikh Edros Sheikh Abdullah</b>		
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# **PARALLEL SESSION (ROOM 1)**

# LEVERAGING ON KNOWLEDGE TRANSFER METHODS IN CPD TO GAIN TRAINING EFFECTIVENESS

Kaswina Ratakrishnan, [kaswina@student.usm.my](mailto:kaswina@student.usm.my), Universiti Sains Malaysia

## ABSTRACT

Training has always been an integral part of education as it plays a major role in Continuous Professional Development (CPD) of teachers and ensures the upkeep of knowledge transfer. These CPDs are planned based on the current needs of the country: in line with the transformation waves of MEB 2013-2025. One instance would be the adaptation of CEFR in the curriculum since 2016 in Malaysia which has then led to many cascades of training sessions spanning from national to school level. As such, many teachers were selected as Master Trainers in various fields to disseminate information from the Curriculum Development Center (CDC) to teachers at the grass root level using the cascade process. While literatures have showed contrasting views on cascading technique, this establishes the gap of knowledge, hence begging the question of which factor(s) are significant in influencing the effectiveness in training. Positing from the view of Bandura's social learning theory, the training effectiveness is proposed to be explored on its relationship with knowledge transfer where training design, trainee characteristics and work environment are the subdivisions. These hypothesized relationships will be analyzed empirically on their significance and correlation in promoting a better training effectiveness. Therefore, this conceptual idea for an exploratory quantitative study is an attempt to carry out a questionnaire-designed survey among Master Trainers. In this scenario, a purposive sampling is opted by defining the inclusion criterion: trainers involved in the cascading training of Common European Framework of Reference (CEFR) module within the 2016-2020 cycle at the national level with trainers from Cambridge University. To conclude, the outcome of this study will provide a rich insight for policymakers and curriculum designers to ensure new and current policies can be effectively implemented.

Keywords: Knowledge Transfer, Training Effectiveness, teachers, CPD, CEFR, Bandura's Social Learning Theory

# **PENGARUH SPIRITUALITI DI SEKOLAH TERHADAP PRESTASI GURU MEDIATOR KOMUNITI PEMBELAJARAN PROFESIONAL.**

Sheikh Edros, edrossheikh@usm.my, University Sains Malaysia.  
Al Amin Mydin, alamin@usm.my, Universiti Sains Malaysia.

## **ABSTRACT**

Kajian ini bertujuan untuk mengkaji pengaruh spiritualiti sekolah terhadap prestasi guru mediator komuniti pembelajaran profesional di Sekolah Menengah Kebangsaan di Pulau Pinang. Secara khususnya, kajian ini bertujuan untuk mengenal pasti (1) tahap spiritualiti di sekolah, komuniti pembelajaran profesional dan prestasi guru, (2) pengaruh spiritualiti di sekolah terhadap prestasi guru, (3) pengaruh komuniti pembelajaran profesional terhadap prestasi guru, (4) cara spiritualiti di sekolah dan komuniti pembelajaran profesional meningkatkan prestasi guru. Kajian ini menggunakan kaedah gabungan (KUAN-Kual) untuk memperoleh data. Bagi kaedah kuantitatif, seramai 236 orang guru dari 15 buah Sekolah Menengah Kebangsaan di Zon Timur Laut Pulau Pinang telah dipilih secara rawak. Manakala bagi kaedah kualitatif pula, seramai lima orang guru dipilih secara rawak antara Sekolah Menengah Kebangsaan yang telah dikaji. Dapatan kajian menunjukkan spiritualiti di sekolah, komuniti pembelajaran profesional dan prestasi guru berada pada tahap tinggi. Keputusan kajian juga menunjukkan bahawa terdapat pengaruh spiritualiti di sekolah secara signifikan terhadap prestasi guru. Seterusnya terdapat pengaruh komuniti pembelajaran profesional secara signifikan terhadap prestasi guru. Kesimpulannya, dapatan kajian ini tidak menafikan sumbangan spiritualiti di sekolah dan komuniti pembelajaran profesional terhadap prestasi guru.

# PERANAN PROGRAM PERSEDIAAN PEMIMPIN SEKOLAH : ANALISIS GLOBAL DAN LOKAL

Shakirah Shuib, *shakirah@student.usm.my*, Universiti Sains Malaysia  
Aziah Ismail, *aziah@usm.my*, Universiti Sains Malaysia

## ABSTRAK

Pendidikan yang berkualiti dilihat apabila lahirnya generasi yang cemerlang melalui kepimpinan sekolah yang berkesan. Pengetua sekolah merupakan individu yang lazimnya dikaitkan sebagai peneraju kepimpinan dalam melahirkan sesebuah institusi yang cemerlang. Artikel yang berbentuk kertas konsep ini bertujuan untuk meneroka peranan program persediaan latihan kepimpinan dalam melengkap diri bakal pemimpin sekolah dalam menghadapi cabaran kepimpinan kelak. Selain itu, kajian ini juga adalah salah satu inisiatif untuk memberi input berkaitan pengalaman atau sumbangan tentang kemahiran kepimpinan. Hal ini kerana, program persediaan kepimpinan lazimnya menekankan kepada usaha meningkatkan kompetensi kepimpinan bakal pemimpin dengan ilmu yang berkaitan dari aspek teori dan amalan yang pada akhirnya menjadi bekalan dalam melaksanakan tugas kepimpinan. Sewajarnya kompetensi kepimpinan perlu dibangunkan daripada awal proses kepimpinan individu iaitu bermula daripada peringkat pemimpin pertengahan, pemimpin kanan dan seterusnya sebagai pengetua sekolah. Huraian berkaitan hal ini adalah berpandukan model pembangunan kepimpinan pemimpin novis yang diperkenalkan oleh Tony Bush (2018) yang melibatkan beberapa fasa pembangunan yang perlu dilalui iaitu pengurusan bakat, persediaan kepimpinan, perekrutan dan pemilihan, induksi, pementoran serta pembangunan profesionalisme. Konsep yang diperkenalkan dalam model ini kemudiannya akan dibincangkan bersandarkan amalan dalam konteks sistem pendidikan di Malaysia. Isu-isu berkaitan program persediaan kepimpinan juga turut dibincangkan dalam artikel ini.

Kata kunci : program persediaan kepimpinan, kompetensi kepimpinan

# WORKPLACE SPIRITUALITY IN PRESCHOOL: CONCEPT AND PERSPECTIVES

Siti Fairos Saffardin, *sitifairos@student.usm.my*, Universiti Sains Malaysia  
Al Amin Mydin, *alamin@usm.my*, Universiti Sains Malaysia

## ABSTRACT

Spirituality and its relationship to the workplace dimension are important, especially for preschool management. Teachers as a catalyst for goal attainment in preschool which must be considered in order to achieve educational goals. The context of the study is still in an early stage of research and as such is discussed by differences in definitions, the dimensions of workplace spirituality, and the theoretical knowledge of spirituality, and another relevant characteristic. The purpose of this study was to analyze academic articles related to spirituality in the workplace and explore the relationship between each dimension on the formation of teacher spirituality in preschool. An emergent process was used to determine three main dimensions of workplace spirituality such as meaningful work (Individual level), sense of community (group level), and alignment with organization values (organization level). This study will also clearly define the influence of Spiritual Leadership Theory on each dimension. While acknowledging that workplace spirituality in an abstract perspective, this study attempts to provide rigorous information based on the empirical support from the literature review. Thus, this study concludes a clear direction for preschool principals and management to investigate the comprehensive consequences of spirituality at work on individuals, communities, and organization's perspectives.

Keywords: workplace spirituality, spirituality, dimensions, Spiritual Leadership Theory

# PENGARUH KEPIMPINAN INSTRUKSIONAL TERHADAP KEBERKESANAN KURIKULUM: KOMUNITI PEMBELAJARAN PROFESIONAL (KPP) SEBAGAI MEDIATOR DI KOLEJ VOKASIONAL

Mohd Syarull Azlan Bin Yaakub, [syarullazlan91@student.usm.my](mailto:syarullazlan91@student.usm.my), Universiti Sains Malaysia  
Al-Amin Mydin, [alamin@usm.my](mailto:alamin@usm.my), Universiti Sains Malaysia

## ABSTRAK

Pengurusan Kurikulum pendidikan dan latihan vokasional dianggap berkesan takkala dapat melahirkan graduan berkemahiran sesuai dengan perubahan semasa dengan keperluan industri. Kurikulum TVET perlu memberikan tumpuan terhadap pemikiran kritis dan kreatif selaras dengan kebolehan pelajar. Penekanan terhadap penyediaan kurikulum yang seimbang dan mengikut kemahuan semasa adalah perlu dalam mempersiapkan tenaga kerja yang berkualiti. Maka pentingnya latihan seperti Komuniti Pembelajaran Profesional (KPP) terhadap pensyarah yang disokong oleh kepimpinan instruksional pengarah kolej vokasional. Kajian ini berusaha mengukur pengaruh kepimpinan instruksional terhadap keberkesanan kurikulum TVET: komuniti pembelajaran profesional sebagai mediator di dalam Kolej Vokasional di sekitar negeri Pulau Pinang. Kajian ini akan melihat sejauh mana kepimpinan instruksional pengetua di kolej vokasional berkesan terhadap keberkesanan kurikulum TVET dan komuniti pembelajaran profesional sebagai mediator. Kajian ini menggunakan pensampelan bertujuan (*purposive sampling*) melibatkan seramai 92 guru. Instrument kepimpinan instruksional diadaptasi oleh Hallinger (1986) ini mengandungi 44 item yang telah diubahsuai. Komuniti Pembelajaran Profesional oleh (Oliver & Hipp, 2010) mengandungi 24 item. Manakala, keberkesanan kurikulum menggunakan "*Kirkparik Model of Evaluation*" oleh Donald L. Kirkpatrick (1959) yang mengandungi 20 item. Dapatan menunjukkan nilai Cronbach Alpha bagi Kepimpinan Instruksional (.979). Seterusnya, nilai Cronbach Alpha bagi Komuniti Pembelajaran Profesional (.945) dan nilai Cronbach Alpha bagi Keberkesanan Kurikulum (.946). Maka nilai Alpha Cronbach setiap konstruk adalah tinggi dan boleh diterima dalam kajian ini. Menurut Bond & Fox (2007), nilai Alpha Cronbach yang boleh diterima kebolehpercayaannya ialah di antara 0.71– 0.99 yang mana ia berada pada tahap yang terbaik. Secara keseluruhannya, keberkesanan kurikulum TVET berjaya dengan kepimpinan instruksional pengarah kolej vokasional yang mempraktikkan amalan komuniti pembelajaran profesional. komuniti pembelajaran profesional.

Kata kunci: Keberkesanan kurikulum, Kepimpinan Instruksional, Komuniti Pembelajaran Profesional

# **PENGARUH KOMUNITI PEMBELAJARAN PROFESIONAL TERHADAP TINGKAH LAKU INOVATIF PENGAJARAN : EFIKASI KOLEKTIF GURU SEBAGAI MEDIATOR**

## **ABSTRAK**

Kajian ini bertujuan untuk mengenal pasti pengaruh komuniti pembelajaran profesional terhadap tingkah laku inovatif pengajaran. Seterusnya kajian ini juga ingin mengenal pasti pengaruh efikasi kolektif guru sebagai mediator terhadap hubungan antara komuniti pembelajaran profesional dan tingkah laku inovatif pengajaran. Pengumpulan data kuantitatif dilakukan melalui kaedah soal selidik terhadap 305 orang guru dari 25 buah sekolah rendah kebangsaan harian di Kuala Muda/Yan, Kedah yang dipilih secara rawak. Soal selidik yang digunakan untuk komuniti pembelajaran profesional telah diubahsuai oleh Institut Aminuddin Baki, Kementerian Pelajaran Malaysia (2013), efikasi kolektif guru pula menggunakan instrumen yang diubahsuai oleh Anandan Kuppan (2011), dan soal selidik tingkah laku inovatif pengajaran adalah menggunakan instrumen yang diubahsuai oleh Nik Azida (2007). Kesemua data dianalisis menggunakan prosedur ANOVA, regresi berganda dan regresi berganda berhierarki. Dapatan menunjukkan bahawa tidak terdapat perbezaan tingkah laku inovatif pengajaran berdasarkan pengalaman mengajar dan bidang pengajian guru di sekolah. Hasil kajian juga menunjukkan terdapat pengaruh yang signifikan komuniti pembelajaran profesional terhadap efikasi kolektif dan tingkah laku inovatif pengajaran guru. Disamping itu, terdapat pengaruh yang signifikan efikasi kolektif terhadap tingkah laku inovatif pengajaran guru. Seterusnya, kajian ini mendapati bahawa efikasi kolektif guru bertindak sebagai mediator terhadap hubungan komuniti pembelajaran profesional (perkongsian amalan personal) dan tingkah laku inovatif pengajaran (penjanaan dan realisasi idea baru). Kesimpulannya, kajian ini menjelaskan bahawa amalan komuniti pembelajaran profesional dapat meningkatkan tingkah laku inovatif pengajaran melalui efikasi kolektif guru di sekolah. Dapatan ini tidak menafikan sumbangan langsung komuniti pembelajaran profesional terhadap tingkah laku inovatif pengajaran tetapi juga menjelaskan budaya komuniti boleh menggunakan faktor efikasi kolektif (mediator) untuk menjana serta merealisasikan idea baru bagi meningkatkan tingkah laku inovatif pengajaran dalam kalangan guru.

# THE ROLE OF STRATEGIC LEADER IN SCHOOL: A REVIEW

Ayu Suhana Wan Jan, [ayusuhana@student.usm.my](mailto:ayusuhana@student.usm.my), Universiti Sains Malaysia  
Al Amin Mydin, [alamin@usm.my](mailto:alamin@usm.my), Universiti Sains Malaysia

## ABSTRACT

Strategic leadership is a critical component in the effective development of schools. Currently the educational debate is shifting to focus on how short-term improvements can become strategically sustainable. According to a recent study of school turnaround in USA, the principals of schools who had higher practices level of strategic leadership appeared to achieve significant improvements in the greatest number of areas. Strategic leadership is the combination of strategic and leadership functions that include defining the vision and moral purposes of an organization and translating them into action. It is a means of shaping the capacity of the organization and the direction it has to take to achieve the shift or change it desires to make. This idea led to the proposed contemporary model of strategic leadership, which comprised five aspects of organizational capabilities (i.e. the task elements of a strategic leader) and four aspects of individual characteristics of a strategic leader (i.e. leader attributes). The strategic leaders involve themselves in five key activities which direction setting, translating strategy into action, enabling the staff to develop and deliver the strategy, determining effective intervention points and developing strategic capabilities.

Keywords: Strategic Leader, dimensions, Strategic Leadership Model



# **SISTEM PENGURUSAN PENILAIAN LATIHAN MENGAJAR: EP-LAM**

Shahabuddin Hashim, *shah@usm.my*, Universiti Sains Malaysia  
Nur Aimuni Aini Tuan Roslan, *aimuniaini@student.usm.my*, Universiti Sains Malaysia  
Nor Asniza Ishak, *asnizaishak@usm.my*, Universiti Sains Malaysia  
Siti Zuraidah Md Osman, *sitizuraidah@usm.my*, Universiti Sains Malaysia

## **ABSTRAK**

Latihan mengajar merupakan kursus wajib yang ditawarkan oleh Pusat Pengajian Ilmu Pendidikan (PPIP), Universiti Sains Malaysia. Pencerapan latihan mengajar akan dibuat oleh penyelia iaitu pensyarah PPIP sebanyak tiga kali sepanjang latihan mengajar dilaksanakan oleh pelajar tahun empat (semester 8) yang mengikuti Program Ijazah Sarjana Muda Perguruan (ISMP). Objektif pembangunan sistem eP-LaM secara dalam talian adalah untuk memudahkan, mempercepatkan proses pencerapan dan capaian maklumat oleh pelajar dan penyelia latihan mengajar. Capaian maklumat yang cepat ini juga penting untuk pihak pentadbir untuk mendapatkan maklum balas tentang analisis prestasi keseluruhan berdasarkan variabel tertentu seperti prestasi pencapaian mengikut opsyen. Hal ini adalah kerana, ketika ini penyelia yang ditugaskan, masih menggunakan borang penilaian secara manual. Terdapat kemungkinan sistem simpanan borang yang tidak sistematik dan melambatkan proses perolehan kembali jika diperlukan kerana borang tidak disimpan secara tersusun dan sistematik. Oleh itu, pembangunan Sistem eP-LaM adalah signifikan kepada para penyelia latihan mengajar, penyelaras kursus latihan mengajar, pelajar dan pihak pentadbiran Institusi Pendidikan yang menawarkan ISMP. Penggunaan Sistem eP-LaM ini dapat membantu mengurangkan beban kerja pensyarah, memudahkan penilaian dan tindakan susulan dibuat, menyimpan semua borang dalam satu sistem pangkalan data, mempercepatkan proses penilaian latihan mengajar dan memudahkan capaian laporan oleh pengguna yang terlibat dan yang dikawal oleh sistem berkenaan. Hal ini dapat meningkatkan produktiviti kerja pensyarah dan juga meningkatkan mutu penyeliaan latihan mengajar, tanpa melibatkan kos pembangunan yang besar. Selain daripada USM, penggunaan sistem ini dijangka dapat membantu memudahkan, mempercepatkan proses pencerapan dan capaian maklumat oleh pelajar dan penyelia latihan mengajar di Institusi pendidikan yang menawarkan kursus latihan mengajar atau yang seumpamanya.

Kata kunci: sistem dalam talian, penilaian, latihan mengajar.

# **INSTITUTIONAL REFORMS IN HIGHER EDUCATION MALAYSIA (HEI): OUTREACH DURING COVID-19 PANDEMIC**

Tan Cheng Yoke, [Taryon\\_tan@yahoo.com](mailto:Taryon_tan@yahoo.com), DISTED College Sdn. Bhd.  
Abdul Jalil Ali, [jalil@usm.my](mailto:jalil@usm.my), Universiti Sains Malaysia

## **ABSTRACT**

Since the outbreak of Covid-19 pandemic worldwide, Malaysian higher education has been switching to online teaching mode since 2019. Many educators were totally unprepared at the time of abrupt change from traditional face-to-face (f2f) teaching mode to online teaching. Despite being tech savvy millennials, the tertiary students face also many challenges, either from disturbance and problems to focus while studying at home, restriction on meetings and discussion with course-mates due to lock down, not to mention time management, and other financial constraints such as internet or data usage, computer problems etc. The paper seeks to discuss on quick and effective reactions imposed by HEI for smoother transition to all stakeholders involved. According to Cesco et al. (2021), the aspects to consider in the digital transformation include broadband network infrastructure, hardware devices, e-learning software, organization of teaching activities, pedagogical issues, diversity and inclusivity, and a number of other issues. There are also a number of technical and human skills, mindsets and mentality that count, as the dates of moving back to f2f learning in higher education remain unknown. Therefore, the HEI management team and the educators have to react fast to capture and retain the students. These become even more critical in private higher educational institutions when the economy is adversely hit. Based on the current scenario and progress, it can be concluded that some have already mastered or improved from practicing online teaching and learning. Nevertheless, I concur with Cesco et al. (2021) that Covid-19 pandemic will irreversibly change higher education, and believe it is for the better too.

Keywords: Institutional reforms, higher education, Covid-19

# **PENGARUH KEPIMPINAN TRANSFORMASIONAL PENGETUA, PERSEKITARAN MENYOKONG DAN KETERIKATAN KERJA TERHADAP TINGKAH LAKU KEWARGANEGARAAN ORGANISASI DI SEKOLAH MENENGAH KEBANGSAAN**

Siti Huwaina Mohamed, fathyna2615@gmail.com, Universiti Sains Malaysia  
Al-Amin Mydin, alamin@usm.my, Universiti Sains Malaysia

## **ABSTRAK**

Kepimpinan transformasi merupakan gaya kepemimpinan yang dapat mencetuskan perubahan sikap dan pemikiran seseorang terhadap tanggungjawabnya. Kepimpinan ini berpusat kepada membina matlamat yang dikongsi bersama, meningkatkan komunikasi serta membuat keputusan secara kolaboratif. Kajian ini bertujuan mengkaji pengaruh kepemimpinan transformasi pengetua dengan tingkah laku kewarganegaraan organisasi di sekolah menengah kebangsaan di utara, Semenanjung Malaysia. Selain itu, kajian ini juga bertujuan mengkaji kesan moderasi keterikatan kerja terhadap hubungan antara kepemimpinan transformasi pengetua dengan tingkah laku kewarganegaraan organisasi guru. Persekitaran menyokong pula dilihat sama ada menjadi mediator dalam hubungan antara kepemimpinan transformasi pengetua dengan tingkah laku kewarganegaraan organisasi guru. Teknik persampelan rawak berstrata digunakan untuk mengenal pasti responden bagi kajian ini. Seramai 775 orang guru dipilih secara rawak sebagai sampel kajian kuantitatif daripada 155 buah sekolah menengah kebangsaan. Dapatan kajian menunjukkan bahawa tahap amalan kepemimpinan transformasi pengetua secara keseluruhannya adalah tinggi ( $M=3.97$ ). Selain itu, kepemimpinan transformasi pengetua didapati mempunyai pengaruh yang signifikan terhadap tingkah laku kewarganegaraan organisasi guru. Justeru, dapatan kajian ini telah memberi impak dalam kepemimpinan pengetua iaitu mengamalkan kepemimpinan transformasi dapat memperkasakan organisasi sekolah agar lebih mampan dan berkesan.

Kata kunci: Kepimpinan transformasional pengetua, persekitaran menyokong, keterikatan kerja, tingkah laku kewarganegaraan organisasi.

# THE PROBLEMS AND CHALLENGES FACING IN THE INTERNATIONAL EDUCATION IN CHINA

Wu Fang, wufang@student.usm.my, Universiti Sains Malaysia  
Shahabuddin bin Hashim, shah@usm.my, Universiti Sains Malaysia

## ABSTRACT

Under the background of globalization, the cultivation of international talents has received increasing attention, and the demand for international talents has also increased. The exchanges and cooperation in higher education are frequent in various countries. Therefore, the international education has become a hot issue in current education development. At present, as China continues to open up to the overseas countries, on the one hand, it continuously expands the scale of foreign students to study in China and improves the quality of learning, and on the other hand, it actively encourages Chinese students to go to other countries to experience the local culture and learn advanced science and technology, and become an international talent with strong academic skills and familiarity with international rules. At present, international education represented by two-way study abroad is also facing many problems and challenges. (1) Insufficient foreign language ability. Foreign language ability is the first obstacle encountered in cross-cultural communication, and it is also a necessary tool to enhance self-competitiveness in an international environment. (2) Weak cross-cultural communication skills. Due to the differences in language and culture, when encountering problems, international students are more inclined to seek help and support from their compatriots, and are less willing to seek help from students from other countries. As a consequence, it is difficult for them to understand and think about problems from a new perspective and truly integrate into a new environment. Therefore, culture shock will appear in a foreign country, which will affect the life and studies of the student. (3) The far-reaching influence of indigenous thinking. Affected by the educational patterns from an early age, Chinese students have very deep stereotypes and tend to be less motivated in the classroom. For them, studying abroad will be very troublesome. On the contrary, international students in China are more flexible in thinking and focus on practice. In Chinese classrooms, they will also feel uncomfortable. (4) Weak practical ability and few practical opportunities. The education model in China is mostly: the teachers speak and the students listen and remember. It is easy to lead to the consequences that most students have poor self-learning ability and weak practical ability. By contrast, the international students in China have advantages in self-learning ability and practical ability, but they have fewer practical opportunities to choose during their education in China. (5) Due to the impact of the COVID-19 epidemic and policy restrictions on entry, visas, and flights of various countries or regions, the students' plan of studying abroad has been greatly affected. Many schools carry out the online teaching and research activities. Although they can also learn knowledge, there are few opportunities for students to get insight of the society and culture of the destination country by themselves. Besides, the students will have not enough opportunities to communication with the supervisors on the questions during their study, which is also the great challenge for students to successfully complete their studies. In short, for international education, whether it is Chinese students studying abroad or students coming to China to study, they should

focus on solving their cross-cultural communication problems, enhance their cross-cultural adaptability, and better coordinate professional knowledge, language and culture. In addition, they should also explore the relationship between individual innovation ability and innovation consciousness, and focus on the cultivation of scientific research and practical ability.

Key words: Intentional education, cross-cultural communication, teaching model

## **STRESS FACTORS AMONG TEACHERS**

Lee Shu Ann, shuannlee@student.usm.my, Universiti Sains Malaysia  
Shahabuddin bin Hashim, shah@usm.my, Universiti Sains Malaysia

### **ABSTRACT**

The subjection of work related stress is becoming more prevailing problem in the career life of teachers due to many roles that teachers need to play in their job and also many factors. This study is to determine the stress factors among stressed teachers. Among the factors of causing high stress teacher which included excessive workload, interpersonal relationship, performance (KPI) stress, insufficient of stuffs, student's behaviour and also lack of quality personal space. Indirectly, high stress among teachers become a trend nowadays. Actually, high stress level among teachers caused a lot of negative effects such as mental health disorder among stressed teachers, low job satisfaction and low performance among teachers. Besides, student's also have bad outcome due to bad mental health of teachers which caused by stress. Although there are many programme to overcome stress among stressed teachers, but the stress level of teachers still increasing. So, the main factors of stress teacher have to determine from this study. This study was designed by using the qualitative approach. The instrument used was a questionnaire which has been adapted from various relevant researchers. A total of 150 teachers were randomly selected as respondents and the data obtained were analysed using SPSS for descriptive statistics and thematic analysis for the interview. The findings of stress factors among teachers show that the excessive workload (92%) is the main factor. And then second factor is interpersonal relationship (86%) , followed by factor lack of personal space (57%) and students' behaviour (48%). From the finding showed that excessive workload, interpersonal relationship, lack of personal space and students' behaviour is the main factors of teachers' stress. As conclusion, a programme is needed to overcome the stress among teachers by increasing the resilience level of teachers so that mental health among teachers and students will be get rid of.

Keywords: stress, mental health, resilience, teacher, excessive workload, interpersonal relationship, personal space, students' behavior

# FOOTBALL TRAINING IN CHINESE COLLEGES: ISSUES AND FUTURE RESEARCH

Zhang Haopeng, [zhanghaopeng@student.usm.my](mailto:zhanghaopeng@student.usm.my), Universiti Sains Malaysia  
Shahabuddin Bin Hashim, [shah@usm.my](mailto:shah@usm.my), Universiti Sains Malaysia

## ABSTRACT

In May 2016, the General Administration of sports of the people's Republic of China issued the 13th five year plan for sports development. The plan pointed out that Chinese sports development has 11 major items and 52 minor items. Only the football project is specifically mentioned as a minor item. In this context, as the bottom of the Chinese football pyramid, the development of campus football instantly entered the research vision of the sports and football circles. The academic circles began to offer suggestions on how to develop Chinese campus football, which has become a hot issue in the research. As the highest echelon of campus football, the importance of college football is self-evident. The traditional college football teaching process often pursues only the simple teaching form, but does not pay attention to what the significance of teaching effect is for the development of college football. To a certain extent, this makes the football teaching process in colleges too formal and simple, and makes the football teaching in colleges gradually lose its due role. The arrival of the new era has created a good opportunity for the innovation and improvement of football teaching in colleges and universities. Colleges should seize the opportunity to comprehensively promote the teaching reform and effectively solve the problems existing in the current teaching, which is extremely necessary to improve the actual teaching effect. The reform and improvement of football teaching can be effectively realized by accurately grasping the defects and deficiencies in current teaching, taking targeted teaching resources, cultivating excellent teachers and improving teaching system.

Keywords : College football ; Football training ; Issues ; reformation ;

# **EFFECTS OF TRANSFORMATIONAL LEADERSHIP ON ORGANIZATIONAL PRODUCTIVITY AT HIGH SCHOOL, GRADES 11 & 12.**

Rahma AlSheedi, [rahma.alsheedi28@moe.om](mailto:rahma.alsheedi28@moe.om) , Ministry of Education  
Al Amin Mydin, [alamin@usm.my](mailto:alamin@usm.my), Universiti Sains Malaysia

## **ABSTRACT**

Research shows that transformational leaders emphasize important behaviors, including motivating subordinates to set challenging goals, giving them the confidence they need to meet their expectations and fully meet their potential. Transformational leadership has been defined as "the leader's behavior that transforms and inspires subordinates to act and exceed their expectations as they transcend personal interest for the good of the organization as some studies proved. Research has shown that transformational leadership involves satisfaction as well as the commitment of employees to the organization. Transformational leadership also impacts the commitment to organizational change. The transformational leader increases individual needs and desires to achieve more and work at a more sustained pace, leading to subordinates' extra effort and performance. Some researchers have theorized that transformational leadership creates employees who are altruistic, faithful, and connected to the organization's goals. These employees often go beyond what they are expected to in their job descriptions. It is also found that the transformational leader affected organizational commitment, generating subordinates' commitment to the organization, organizational goals, and values. Trust represents an essential element in the relationship that exists between transformational leaders and their subordinates. The degree of trust in an organization can determine a large part of the organization's character and influence organizational structure, work satisfaction, commitment, communication, and organizational behavior. There is empirical evidence showing a relationship between transformational leadership on the one hand and the creativity and innovative ideas of subordinates on the other.

**Keywords:** High school, transformational leadership, organizational productivity, organization's goals.



# ATTRIBUTES OF SCHOOL LEADERS TOWARDS ACHIEVING SUSTAINABLE LEADERSHIP IN OMANI SCHOOL

Aisha Mohamed Khasib Alhadhrami, [Aisha-alhadrami@student.usm.my](mailto:Aisha-alhadrami@student.usm.my), Universiti Sains Malaysia  
Dr. Alamin Mydin, [alamin@usm.my](mailto:alamin@usm.my), Universiti Sains Malaysia  
Fatma Mohamed Alriami, [Fatma55117@moe.om](mailto:Fatma55117@moe.om)

## ABSTRACT

A principal has a critical role in determining a school's direction and performance. The principal's talents and abilities determine whether or not a school is dynamic. To be exceptional, the principle must have exceptional character. As a result, selecting and promoting school principals should be done in a methodical and objective manner. To ensure the quality and high standard of national education, the entire process must be examined. Selection based on seniority or competency in work performance through appraisal of management and administrative skills, as is now done, may not be appropriate for improving primary leadership. The purpose of this study will identify and confirm the conceptual framework and attributes of school leaders (principals) that are required for sustainable leadership. The main question of this study is: what kind of characteristics dose school leadership need towards Achieving Sustainable Leadership? For the purposes of this study, the quantitative method was used, which will be done by questionnaires. Teachers from different Omani schools made up the sample population.

Keywords: leadership, sustainable, attributes of school leaders

# **EXPERTS' PERSPECTIVES ON TEACHERS' ESSENTIAL SKILLS IN THE INCULCATION OF HISTORY VALUES**

Norliza Mohamad, norliza.mohamad1983@gmail.com, Universiti Teknologi Malaysia  
Ahmad Johari Sihes, p.joha@utm.my, Universiti Teknologi Malaysia

## **ABSTRACT**

The role of History teachers as agents of values inculcation through the teaching and learning of History is vital in interpreting the National Education Philosophy (NEP) in produce high-value citizens. A value-laden orientation in History education necessitates teachers' accountability in upholding values for future generations of students. In the context of this qualitative study, the researcher conducted semi-structured interviews with nine History experts, including three History teachers and six History instructors, for this study. These experts are directly involved in the supervision of History teachers and prospective teachers, the teaching of History subjects in universities and schools, and the development of the History Standard Based Curriculum for Secondary School (KSSM). All of these experts have at least 15 years of teaching experience. The study's data were thematically analysed using Atlas ti 8. software. The analysis was carried out using open coding, axial coding, and selective coding, all of which were carefully carried out by the researcher to obtain the themes of teachers' skills in value application. This study presents seven themes of teacher skills developed to form aspects of teacher skills in applying values through the teaching of History in secondary schools. Value integration skills, pedagogy skills, communication skills, creative skills, planning skills, facilitation skills, and History discipline skills are the seven themes. The findings of this study assist researchers in conducting a more detailed literature review on aspects of teachers' skills in the application of values.

Keywords: History Experts, History Teachers', Teachers' Skills, Values Inculcation.

# **AMALAN KAEDAH PENTAKSIRAN BILIK DARJAH KURIKULUM PENDIDIKAN ISLAM**

Norfarahin binti Mohd Zamri, Mohd Isa bin Hamzah, Shahlan bin Surat

## **ABSTRAK**

Perubahan pendidikan dalam aspek pentaksiran dilaksanakan agar bersesuaian dengan matlamat pendidikan terkini. Konteks kajian berfokus kepada perubahan pelaksanaan pentaksiran dalam Pengajaran dan Pembelajaran (PdP) Tahap 1 (Tahun 1, 2 dan 3) sekolah rendah berdasarkan pemansuhan peperiksaan pada tahun 2019 kepada Pentaksiran Bilik Darjah (PBD) kurikulum Pendidikan Islam KSSR (Semakan 2017). PBD merupakan salah satu pentaksiran di bawah komponen akademik. Kajian ini melibatkan 350 orang guru Pendidikan Islam yang mengajar murid Tahap 1 di Negeri Selangor dengan menggunakan borang soal selidik sebagai instrumen kajian. Antara tujuan dilaksanakan adalah untuk mengenalpasti kaedah pentaksiran yang dilaksanakan oleh guru Pendidikan Islam dalam pelaksanaan PBD seiring dengan pemansuhan amalan peperiksaan pertengahan tahun dan akhir tahun bagi murid Tahap I di semua sekolah rendah Kementerian Pendidikan Malaysia (KPM) bermula pada tahun 2019. Dapatan kajian menunjukkan bahawa kaedah yang paling tinggi digunakan ialah kaedah pemerhatian (M: 4.13, SP: 0.707), kedua ialah kaedah bertulis (M: 4.12, SP: 0.704), kaedah gabungan (M: 4.12, SP: 0.698) manakala kaedah yang paling rendah dilaksanakan ialah kaedah lisan (M: 4.09, SP: 0.694). Kajian ini menunjukkan guru Pendidikan Islam mengamalkan kesemua kaedah PBD yang disarankan oleh KPM berada pada tahap yang tinggi. Kesemua kaedah dilaksanakan oleh guru Pendidikan Islam agar dapat menghasilkan pelaksanaan PBD yang berkesan ke arah keberhasilan murid selaras dengan sasaran Pelan Pembangunan Pendidikan Malaysia (PPPM) 2013 – 2025.

Kata Kunci: kaedah pelaksanaan pentaksiran bilik darjah, pentaksiran bilik darjah, perubahan pendidikan, kurikulum pendidikan islam.

# **STUDI KASUS IMPLEMENTASI PENDIDIKAN KARAKTER DI MA'HAD AL-JAMI'AH (PESANTREN KAMPUS) IAIN SAMARINDA, KALIMANTAN TIMUR**

Dina Destari, Noor Ellyawati and Syarifaturrahmatullah Syarifaturrahmatullah

## **ABSTRAK**

Character education at this time goes hand in hand with educational culture, therefore IAIN Samarinda as an Islamic-breathing campus has the Ma'had Al-Jami'ah (Pesantren Mahasiswa/ PESKAM) programme, where one of its missions is to create a conducive atmosphere for the development of students' personalities who have faith and spiritual stability, morals, and breadth of knowledge related to character education. This study aims to determine the implementation of character education at Ma'had Al-Jami'ah (Campus Islamic Boarding School) IAIN Samarinda by using a qualitative approach and case study research. Data collection techniques are observation, deep interview, and documentation. The credibility test is done by transferability, dependability, and confirmability. The results of this case study research show that all parties play a role in implementing character education to create students who behave and have the character of pious students in their daily lives with the learning resources being lecturers (ustadz/zah). The character of lecturers as motivators, educators, role models is a real example that is admired and imitated by all students on campus ma'had. Habituation activities in PESKAM Campus II IAIN Samarinda can be seen through spontaneous, routine, role models, conditioning, and outbound activities. Based on the results of the study, the implementation of character education in Ma'had Al-Jami'ah went well where there were supporting and inhibiting factors. Although there are inhibiting factors, this is handled by IAIN Samarinda by conducting coordination meetings and evaluating the development of character education at the end of each semester. This is useful as a form of supervision carried out by the campus ma'had towards students in the first year.

Keywords: Character education, PESKAM (Ma'had Al -Jami'ah), character values.

# UJI ANTIMIKROBA DAN EFEK ANTIDIABETIK EKSTRAK ETANOL DAUN MANGROVE RHIZOPHORA MUCRONATA

Usman Usman, [usman@fkip.unmul.ac.id](mailto:usman@fkip.unmul.ac.id), Mulawarman University  
Samarinda, East Kalimantan, Indonesia

## ABSTRAK

Latar Belakang: *Rhizophora mucronata* adalah tanaman yang mendominasi hutan mangrove di kawasan Pantai Muara Badak, Kalimantan Timur, Indonesia. Manfaat tanaman mangrove sebagai sumber senyawa bioaktif yang dapat digunakan sebagai bahan obat, antibiotik, dan bahan kosmetik. Namun potensi dari tanaman mangrove belum dimanfaatkan secara maksimal. Penelitian ini bertujuan untuk menentukan senyawa metabolit sekunder, aktivitas antimikroba, dan efek antidiabetes dari ekstrak etanol daun mangrove *Rhizophora mucronata*. Metode Penelitian: Sampel daun mangrove *Rhizophora mucronata* diekstraksi secara maserasi dengan menggunakan pelarut etanol. Selanjutnya Ekstrak etanol pekat daun mangrove *Rhizophora mucronata* yang diperoleh, dilakukan uji fitokimia (uji alkaloid, flavonoid, steroid, terpenoid, senyawa fenolik, tannin, dan saponin) secara kualitatif. Kemudian uji antibakteri dan antijamur dengan metode difusi agar (difusi Kirby- Bauer). Bakteri dan jamur yang digunakan dalam penelitian ini yaitu *Staphylococcus aureus*, *Escherichiacoli*, *Aspergillus niger*, dan *Candida albicans*. Serta uji antidiabetes dengan metode toleransi glukosa darah. Hasil & Pembahasan: Hasil uji fitokimia ekstrak etanol daun mangrove *Rhizophora mucronata* positif mengandung senyawa golongan; flavonoid, steroid, senyawa fenolik, dan saponin. Hasil uji antimikroba ekstrak etanol daun *Rhizophora mucronata* tidak menghambat pertumbuhan bakteri dan jamur yaitu *Staphylococcus aureus*, *Escherichia coli*, *Aspergillus niger*, dan *Candida albicans*. Sedangkan hasil uji efek antidiabetes dari ekstrak etanol daun *Rhizophora Mucronata* mampu menurunkan kadar glukosa darah pada tikus yang mengalami hiperglikemia setelah diinduksi dengan aloksan. Efek antidiabetes tertinggi pada pemberian ekstrak etanol daun *Rhizophora Mucronata*, dosis 625 mg / kg BB. Kesimpulan: Hasil penelitian ini menunjukkan bahwa ekstrak etanol daun *Rhizophora mucronata*, mengandung senyawa metabolit sekunder golongan; flavonoid, steroid, senyawa fenolik, dan saponin. Ekstrak etanol daun *Rhizophora mucronata* berpotensi sebagai antidiabetes, namun ekstrak etanol tersebut tidak mampu menghambat pertumbuhan bakteri dan jamur.

Kata Kunci: Ekstrak Mangrove, Metabolit Sekunder, Aktivitas Antimikroba, Efek And diabetes

# DEVELOPMENT OF CRITICAL THINKING ABILITY INSTRUMENTS FOR VOCATIONAL STUDENTS ON ACID-BASE MATERIAL

Imroatus Sholihah, [rania.kadafi@gmail.com](mailto:rania.kadafi@gmail.com)  
Riskan Qadar, [riskanqadar@fkip.unmul.ac.id](mailto:riskanqadar@fkip.unmul.ac.id)  
Mukhamad Nurhadi, [nurhadi1969@yahoo.co.id](mailto:nurhadi1969@yahoo.co.id)

## ABSTRAK

Critical thinking is an aspect of higher-level thinking that is related to students' skills in solving problems in their lives. With the growth of critical thinking skills, of course we need an instrument that can be used in measuring students' critical thinking skills. In this study, researchers wanted to develop an instrument that could be used to measure students' critical thinking skills, especially Vocational High Schools in the form of reasoned multiple choice. This research was a Research and Development study using the ADDIE (Analysis Design Development Implementation Evaluation) approach. To determine the validity and feasibility of the instruments that have been developed, content validation is carried out to experts or experts to obtain a valid instrument that is suitable for general use. To find out the instrument's quality, an instrument quality test was conducted which included analysis of validity, reliability, difficulty level and different power using IBM SPSS Statistics 2.5 and Microsoft Excel software. The product produced from this research was in the form of 25 students' critical thinking skills instruments that were equipped with covers, question boxes, assessment rubrics, assessment guidelines and answer keys. Instrument quality test results are feasible to be used to measure the critical thinking skills of vocational students on acidbase material with a number of valid questions as many as 25 questions, 100% (after going through repairs), item reliability of 0.747, with criteria for medium difficulty (100%) and power the item differentiator was very good (64%), good (34%).

Key words : Critical Thinking, ADDIE

# **PEMBANGUNAN E-LABSHEET BAGI AMALAN BENGKEL MESIN FLIP VACUUM THERMOFORMING (E-VACTFORM)**

Nor Mahani Md Rasidi, [normahani9116@gmail.com](mailto:normahani9116@gmail.com), Politeknik Sultan Abdul Halim Mu'adzam Shah  
Mohd Fathurrahman Kamarudin, Politeknik Sultan Abdul Halim Mu'adzam Shah

## **ABSTRAK**

Kemajuan teknologi dan komunikasi telah meningkatkan penggunaan internet bagi mewujudkan suatu konsep baharu dalam proses pembelajaran iaitu epembelajaran yang mengaplikasikan penggunaan peranti tanpa wayar dan mudah alih seperti telefon pintar yang lebih fleksibel dari segi masa, tempat, kaedah dan bahan pembelajaran. Dalam kursus DJC3032 Plastic Workshop Practice bagi topik thermoforming, pelaksanaan amali serta tatacara pengendalian mesin masih menggunakan teknik konvensional. Labsheet sedia ada terhad ruang untuk keterangan teori, metodologi amali serta proses pengendalian alatan pemesinan. Manakala amalan kebiasaan pensyarah mencetak dan membuat salinan labsheet untuk diberikan kepada pelajar adalah memakan masa, meningkatkan kos mencetak, melibatkan banyak penggunaan kertas dan tidak mesra pengguna. Oleh itu, eVacTform dihasilkan sebagai bahan pengajaran berupa e-labsheet yang terdiri dari kod QR yang mengandungi slaid nota teori, slaid prosedur pengendalian amali, pengumpulan data dan video pengoperasian mesin. Kaedah kajian menggunakan model ADDIE yang menggunakan instrumen borang senarai semak, borang soal selidik yang diadaptasi dari teori Technology Acceptance Model (TAM) dan laman web QR Code Generator. Bagi kajian persepsi tahap keberkesanan e-labsheet, seramai 40 orang pelajar semester 3 program Diploma Kejuruteraan Mekanikal (Plastik) dari Politeknik Sultan Abdul Halim Mu'adzasm Shah telah dipilih bagi menjawab borang soal selidik. Hasil dapatan menunjukkan kod QR yang telah dibangunkan dapat memaparkan info maklumat dengan berkesan. Manakala persepsi pelajar pula menunjukkan penggunaan kod QR dapat memudahkan pembelajaran dan meningkatkan minat terhadap pembelajaran. Dengan adanya e-labsheet ini ia memudahkan pelajar dan pensyarah dari segi penyampaian maklumat, masa dan kos serta pencapaian objektif pengajaran dan pembelajaran.

# KESAN PEMBELAJARAN BERASASKAN MASALAH TERHADAP PENCAPAIAN TEKNOLOGI HIJAU, PEMIKIRAN LESTARI DAN TINGKAH LAKU LESTARI

Mardiyah Rahim, [mardiyahrr@gmail.com](mailto:mardiyahrr@gmail.com), Universiti Sains Malaysia  
Nooraida Yakob, [nooraida@usm.my](mailto:nooraida@usm.my), Universiti Sains Malaysia

## ABSTRAK

Matlamat utama PuPL ialah pembentukan individu yang bertingkah laku secara lestari. Modul Teknologi Hijau (MTH) telah disediakan oleh pihak CETREE bagi menyokong pembelajaran Teknologi Hijau. Tujuan utama kajian ini ialah untuk mengkaji kesan intervensi PBM MTH ke atas pencapaian Topik Teknologi Hijau Melestarikan Alam, pembentukan pemikiran lestari dan tingkah laku lestari. Pensampelan tidak rawak secara *intact group* digunakan yang melibatkan murid tingkatan empat di negeri Perak. Reka bentuk eksperimen kuasi digunakan dalam kajian ini. Kumpulan rawatan melibatkan 27 murid (N=27) dan 20 murid sebagai kumpulan kawalan (N=20). Kumpulan rawatan mengikuti pembelajaran menggunakan pendekatan PBM MTH sementara kumpulan kawalan mengikuti pembelajaran MTH selama empat minggu. Data dikumpulkan bagi tiga jenis instrumen iaitu PTH, PL dan TLL yang melibatkan ujian pra-pos. Keputusan menunjukkan PTH kumpulan rawatan lebih baik berbanding kumpulan kawalan. Namun begitu, kumpulan kawalan mempamerkan skor min TLL yang lebih baik berbanding kumpulan rawatan. Kedua-dua kumpulan tidak menunjukkan perbezaan yang signifikan bagi skor PL. Penggunaan modul MTH secara PjBM dan PBM menyumbang kepada pembentukan nilai kelestarian individu, pemikiran dan pencapaian. Penggunaan modul ini boleh diperluaskan kepada mata pelajaran lain dan diintegrasikan dalam pembelajaran secara modular.

Kata kunci: pembelajaran berasaskan masalah, modul teknologi hijau, pemikiran lestari, tingkah laku lestari, pencapaian teknologi hijau



## **PENYELIAAN INSTRUKSIONAL DAN KAPASITI GURU**

Norizan Binti Abdul Patah, [norizanpatah@student.usm.my](mailto:norizanpatah@student.usm.my), Universiti Sains Malaysia  
Al Amin Mydin, [Alamin@usm.my](mailto:Alamin@usm.my), Universiti Sains Malaysia

### **ABSTRAK**

Kajian ini bertujuan untuk mengkaji tahap penyeliaan instruksional dan kapasiti guru. Kajian ini juga bertujuan untuk mengenal pasti pengaruh penyeliaan instruksional terhadap kapasiti guru. Sebanyak 260 guru dari 11 sekolah menengah di daerah Barat Daya, Pulau Pinang dipilih secara rawak sebagai sampel kajian. Kajian kuantitatif ini menggunakan kaedah tinjauan. Soal selidik untuk instrumen penyeliaan instruksional menggunakan instrumen daripada Hallinger (2003), Glickman et al. (1985), dan Hoy dan Tschannen (2003) dan kapasiti guru daripada kajian Krim (2009) dan dianalisis menggunakan statistik deskriptif dan inferensi. Hasil kajian menunjukkan bahawa penyeliaan instruksional, dan kapasiti guru berada pada tahap tinggi. Hasil kajian juga mendapati bahawa penyeliaan instruksional mempunyai pengaruh yang signifikan terhadap kapasiti guru. Kesimpulannya, pentadbir sekolah harus memastikan bahawa pengawasan instruksional dilaksanakan dengan berkesan dan pada masa yang sama dapat mengembangkan kapasiti guru.

Kata kunci: Penyeliaan Instruksional, Kapasiti Guru,

# VALIDITY AND RELIABILITY OF AN INSTRUMENT IN NEEDS ANALYSIS RESEARCH

Wan Roslina, W.Y., wanroslina58@student.usm.my, Universiti Sains Malaysia  
Aswati, H., aswati@usm.my, Universiti Sains Malaysia.  
Zamri, C., zamrichik2015@gmail.com, Universiti Sultan Zainal Abidin,

## ABSTRACT

A pilot study for a needs analysis research was conducted using a questionnaire to measure the knowledge, attitudes, self-efficacy, and preschool teachers' acceptance of a proposed Quran memorisation pedagogical module. The questionnaire applied by Liu et al. (2016) to assess the knowledge, attitudes, and perceptions of autism spectrum disorder in a stratified sampling of preschool teachers in China was adapted for this needs analysis research. An instrument which has a high validity will display a high accuracy in the measurements of the variables set by the researcher. Meanwhile, reliability of the adapted instrument in this needs analysis research concerns about the consistency in the scores upon repeated applications to the respondents. The researcher followed the six-steps procedure suggested by Hambleton (1993) Instrument for the adaptation. The study involved teachers from 10 government and 11 private preschools. The validity and reliability of the instrument was initially tested using the Item-Content Validity Index (I-CVI) of three experts. Results achieved through I-CVI was 1.00 which showed that the instrument has a high item content validity. The pilot study for the validity and reliability of the instrument was confirmed through the Cronbach's Alpha readings of 0.734 for the Knowledge construct, 0.932 for the Attitudes construct, 0.937 for the Self- efficacy construct, and 0.955 for the Pedagogical Module Acceptance construct. Overall Cronbach's Alpha reading was 0.942 for the instrument. It is concluded that this instrument has a high validity and reliability (Cronbach's Alpha > 0.7) which was used in the actual study of needs analysis.

Keywords: validity, reliability, Item-Content Validity Index, Cronbach Alpha, needs analysis

# **THE EFFECT ADDITION OF COCONUT MEAT (COCOS NUCIFERA) TO THE CHARACTERISTIC WATER CONTENT, ASH CONTENT, PH, PERCENT SEDIMENT AND SENSORY TEST FROM ROBUSTA COFFE POWDER AND COFFE DRINK (COFFEA CANEPHORA).**

Agustinus Lolopayung, [gustilolopayung@gmail.com](mailto:gustilolopayung@gmail.com), university of Mulawarman  
Dra. Yuliani, MP [Yulianicandra482@gmail.com](mailto:Yulianicandra482@gmail.com), university of Mulawarman  
Anton Rahmadi, S.TP., M.Sc., Ph.D, [antonrahmadi@gmail.com](mailto:antonrahmadi@gmail.com), university of Mulawarman

## **ABSTRACT**

This research aims to investigate the effect addition of coconut meat at robusta coffe roasting process to the water content, ash content, pH, percent sediment and panelist sensory acceptance level from coffe powder and coffe drink. This research used a Completely Randomized Design (CRD) with 7 treatments addition of coconut meat (0%, 5%, 10%, 15%, 20%, 25% dan 30%) from the total coffee beans with 3 repetitions. Data were analysed with analysis of variance (ANOVA). For organoleptic data is processed by using Friedman test. If the data showed the significant of difference then continued by Tukey test with standard  $\alpha$  5%. Parameters that observed are water content, ash content, pH, percent sediment and sensory test. The result of research showed that addition of coconut meat had a significant effect on water content, pH, color sensory, aroma, taste of coffee, coconut taste, sour taste fom coffee powder and coffee drink, while percent sediment and texture was not significant. Steamed coffee powder and coffee drink from the addition of 30% of coconut meat from the total coffee beans obtained the best sensory response, with a water content of 6.3%; ash content 5,5%; pH 6,2; and percent sediment 38%. the overall hedonic value is like, with the characteristics of dark brown, slightly scented with coffee & coconut, smooth textured, slightly flavored coffee, slightly flavored coconut.

Keywords : Coconut meat, coffee powder, coffee drink, sensory test

# **THE EFFECT OF LEARNING MEDIA BASED ON ANDROID SMART APPS CREATOR ON ECOSYSTEM MATERIALS WITH 4C SKILLS (CRITICAL THINKING, CREATIVITY, COLLABORATION, COMMUNICATION)**

Ranu Tri Antoko, [ranutokun81@gmail.com](mailto:ranutokun81@gmail.com), the University of Mulawarman  
Elsje Theodora Maasawet, [emaasawet@gmail.com](mailto:emaasawet@gmail.com), the University of Mulawarman  
Abdul Hakim, [abdul.hakim@fkip.unmul.ac.id](mailto:abdul.hakim@fkip.unmul.ac.id), the University of Mulawarman

## **ABSTRACT**

The focus of the problem in this study is the effect of using SAC Android learning media with ecosystem materials on student learning outcomes and motivation. This research design uses a quantitative research design with a quasi-experimental type of research uses all subjects in the study group (intact group) to be treated with a product or research instrument. The sample in this study were high school students in Samarinda. The data obtained through the pre-test and post-test instruments were analyzed using paired sample t-test and independent samples t-test.

Keywords: Smart Apps Creator Android, learning outcomes, 4C skills.

# **PENGGUNAAN AYAT AL-QURAN DI DALAM BUKU “SECONDARY SCIENCE FOR BRUNEI DARUSSALAM TEXTBOOK- YEAR 7”: PANDANGAN DAN CADANGAN**

Dr Hajah Rafidah binti Haji Abdullah, [rafidah.abdullah@unissa.edu.bn](mailto:rafidah.abdullah@unissa.edu.bn), Penolong Profesor, Fakulti Bahasa Arab, UNISSA

Dr Mohammad Hilmy Baihaqy bin Haji Awang Yussof, [baihaqy.yussof@unissa.edu.bn](mailto:baihaqy.yussof@unissa.edu.bn), Pensyarah, Fakulti Pengurusan dan Pembangunan Islam, UNISSA

## **ABSTRAK**

Al-Quran Al-Kareem yang diturunkan di dalam bahasa Arab merupakan mukjizat teragung Nabi Muhammad ﷺ, yang di dalamnya terkandung pelbagai rahsia ilmu termasuklah aspek hubungan al-Quran dan Ilmu Sains. Perkara ini dapat diselongkari dengan mendalami *I'jaz atau* rahsia keagungan yang terdapat di dalam ayat-ayat al-Quran tersebut. Sebagai sebuah negara yang memegang falsafah Melayu Islam Beraja, dan sangat sinonim dengan sebuah Negara Zikir, Negara Brunei Darussalam telah menerapkan penggunaan ayat-ayat al-Quran al-Kareem di dalam beberapa buku teks yang diguna pakai dalam sistem pendidikan di negara ini agar guru dan pelajar dapat mengkaitkan ayat-ayat al-Quran tersebut dengan isi kandungan ilmu yang akan dipelajari, dan ini termasuklah Ilmu Sains. Ilmu Sains adalah satu bidang ilmu yang mendorong manusia untuk memperkembangkan aktiviti penyelidikan bagi menghasilkan pelbagai penciptaan dan penemuan baru dari pelbagai sudut seperti pertanian, perubatan dan komunikasi, bagi membantu manusia menjalani kehidupan seharian dengan lebih mudah, cepat dan selesa. Antara objektif kajian ini dijalankan ialah bagi membantu guru dan pelajar dalam memahami Ilmu Sains dengan lebih mendalam menurut teori Islam, dengan merujuk kepada al-Quran Al-Kareem. Buku teks “*Secondary Science for Brunei Darussalam Textbook - Year 7*” merangkumi 8 tajuk dasar. Namun begitu, kajian ini hanya akan memfokuskan kepada satu tajuk dasar sahaja iaitu “*water*” (air). Kajian akan mengaplikasikan kaedah kualitatif bagi mendapat data. Pengkaji akan menganalisis ayat al-quran dalam muka surat pengenalan yang telah disediakan, dan seterusnya akan memberikan pandangan dan cadangan mengenai kesesuaian penggunaan ayat-ayat berkenaan. Pengkaji juga akan menambah beberapa ayat al-Quran al-Kareem yang difikirkan sesuai dan relevan dengan sub-tajuk yang dipelajari. Kajian ini dihasratkan agar dapat membuka minda dan memberikan idea kepada pihak berwajib untuk menambah bilangan penggunaan ayat-ayat al-Quran al-Kareem di dalam buku-buku teks di negara ini, kerana Al-Quran Al-Kareem merupakan sumber pertama yang wajib dirujuk, yang di dalamnya terdapat pelbagai rahsia yang hanya akan dapat diselongkar dengan menjalankan kajian yang berterusan bersama pakar dalam bidang bersesuaian.

Kata kunci: Al-Quran, Sains, Silibus, Pendidikan, Buku teks

# **PERANAN KOMPLEKS RUMAH KEBAJIKAN KAMPONG BELIMBING SUBOK SEBAGAI BAHAGIAN INISIATIF KERAJAAN BRUNEI DARUSSALAM DALAM MELESTARI ISLAM DI ERA KONTEMPORARI**

Seri Ramizah binti Matussin, [seriramizahmatussin@gmail.com](mailto:seriramizahmatussin@gmail.com),  
Associate Professor Dr. Anis Malik Thoha, [malik.thoha@unissa.edu.bn](mailto:malik.thoha@unissa.edu.bn)

## **ABSTRAK**

Masalah sosial adalah merupakan satu fenomena yang tidak dapat dielak berlaku dalam masyarakat sekarang termasuklah pada remaja. Pelbagai cara diusahakan untuk membendung permasalahan ini. Di dalam konteks Negara Brunei Darussalam, Kompleks Rumah Kebajikan (KRK), Kampong Belimbing Subok merupakan sebuah Institusi Kerajaan dan organisasi kebajikan di bawah Institusi Kebajikan, Jabatan Pembangunan Masyarakat, Kementerian Kebudayaan Belia dan Sukan yang ditubuhkan untuk menangani remaja bermasalah sosial melalui pembimbingan dan penerapan nilai-nilai Islam terhadap remaja tahanan di KRK agar mereka kembali menjadi insan yang berakhlak mulia serta berguna kepada agama, masyarakat dan negara. Kajian ini akan mengupas mengenai peranan KRK sebagai salah satu inisiatif kerajaan Brunei bagi melestari Islam di era kontemporari yang kian mencabar terutama di kalangan para remaja. Ianya mencuba mengkaji program dan modul serta metode pembimbingan remaja tahanan di KRK, mengenai dengan apa sahajakah jenis program ini, sejauh manakah keberkesannya, dan bagaimanakah langkah-langkah yang perlu dibuat untuk meningkatkan perkhidmatan kebajikan yang lebih berkesan. Kajian ini menggunakan pendekatan kualitatif sepenuhnya melalui kaedah temubual dalam mendapatkan data-data yang diperlukan. Hasil kajian ini mendapati bahawa peranan KRK dapat dipertingkatkan lagi dengan pengemaskinian program dan metode pembimbingan yang bersesuaian dengan metode dakwah surah al-Nahl:125.

Kata Kunci: Kompleks Rumah Kebajikan, dakwah, an-Nahl, pembimbingan remaja, remaja bermasalah.

# FACING THE REALITY OF ONLINE DISTANCE LEARNING IN HIGHSCHOOL

Raymond anak Simon, [ramonsimon94@gmail.com](mailto:ramonsimon94@gmail.com)

## ABSTRACT

As the world is currently affected by the Covid-19 pandemic, the educational system has changed their teaching and learning style that incorporate the usage of various technologies to achieve the goal that is delivering the lesson effectively through online distance learning. It applies to all high school across the world including Malaysia. However, there are advantage and weaknesses that can be seen when the lessons were conducted through online distance learning. The advantage of online distance learning is that both teachers and students can protect themselves while working comfortably at home. Meanwhile, the first weaknesses of conducting lessons through online distance learning is socialise problem. As the students are only interactive using social medias only, their socialising skills are limited. They only actively engage with the person who they have known already while some of the students remain passive. Apart from that, the workload for the teachers will increase. They need to learn how to use software, interactive platforms and so on so that they can deliver their lesson effectively. Not to mention, they are the one who will also need to create some interactive activities for the students. In a nutshell, the presentation is all about raising awareness about the online distance learning. It seems to look fun in the beginning, but the fact is that although there are a lot of advantages of conducting the lessons online there are some problems that need to be address so that online distance learning can be as effective as face-to-face teaching and learning method.



# **PARALLEL SESSION (ROOM 2)**



# PERANAN, STRATEGI DAN CABARAN PENYELIAAN PENGAJARAN ERA PANDEMIK COVID'19: SOROTAN KAJIAN SECARA SISTEMATIK

Yusairi Othman, [yusairi@student.usm.my](mailto:yusairi@student.usm.my), Universiti Sains Malaysia  
Al Amin Mydin, [alamin@usm.my](mailto:alamin@usm.my), Universiti Sains Malaysia

## ABSTRAK

Penyeliaan pengajaran adalah merujuk kepada usaha membangunkan guru secara individu atau berkumpulan supaya proses pengajaran dan pembelajaran (PdP) dapat dijalankan secara optimum untuk mencapai objektif pengajaran yang di tetapkan. Model penyeliaan pengajaran oleh pemimpin instruksional sekolah dijalankan menggunakan kaedah pemerhatian secara bersemuka, namun kaedah penyeliaan ini telah bertukar kepada bentuk maya disebabkan oleh pandemik Covid'19. Peralihan kaedah pengajaran dan pembelajaran di rumah (PdPR) secara mendesak ini menimbulkan pelbagai masalah terutamanya kemahiran guru menggunakan medium teknologi dalam proses pengajaran, begitu juga pelajar dan ibubapa. Ini kerana guru-guru dan pelajar telah melaksanakan proses PdPR secara atas talian untuk mengelakkan berlakunya jangkitan Covid'19 iaitu bekerja dan belajar dari rumah. Oleh itu, kajian ini adalah bertujuan untuk mengenalpasti: 1) peranan yang perlu dimainkan oleh pemimpin instruksional; 2) strategi penyeliaan pengajaran yang dilaksanakan; dan 3) cabaran yang dihadapi untuk melaksanakan penyeliaan pengajaran dalam era pandemik Covid'19. Berpandukan kaedah sorotan kajian PRISMA (*Preferred Reporting Items for Systematic Reviews and Meta-Analyses*), sorotan kajian secara sistematik dilakukan dalam pengkalan data *Scopus* dan *Google Scholar* melibatkan 13 artikel yang berkaitan dari tahun 2019-2021. Dapatan sorotan kajian telah mengenalpasti peranan yang dimainkan oleh pemimpin instruksional sekolah telah berubah daripada pencerapan untuk tujuan penilaian kepada bentuk sokongan dan bantuan dalam pelbagai aspek dalam meningkatkan keupayaan pemimpin instruksional dan guru, pelajar serta komuniti dengan menggunakan pelbagai medium elektronik untuk berhubung supaya proses pengajaran dan pembelajaran dapat diteruskan. Beberapa cadangan untuk penambahbaikan kajian ini adalah dari aspek pencarian artikel menggunakan lebih banyak pengkalan data dan pelbagai strategi pencarian seperti penjejakan rujukan, pencarian rujukan, bola salji, dan menghubungi pakar.

Kata kunci: Pengajaran dan Pembelajaran, Pemimpin Instruksional, Penyeliaan Pengajaran, Covid'19

# **KONSEP PELAKSANAAN PENYELIAAN PENGAJARAN DAN PEMBELAJARAN GURU DI SEKOLAH**

Nur Khairunnisa Mohd Noor, nisa310@usm.my , Universiti Sains Malaysia  
Al Amin Mydin, alamin@usm.my, Universiti Sains Malaysia

## **ABSTRAK**

Penyeliaan merupakan instrumen yang berperanan penting untuk mendiagnosis dan merawat serta memastikan kualiti pengajaran dan pembelajaran guru di dalam bilik darjah sentiasa dapat dipertahankan dan ke arah menjadikan bidang perguruan suatu bidang yang profesional. Tujuan kajian ini adalah untuk mengenal pasti tahap pelaksanaan penyeliaan pengajaran dan pembelajaran di sekolah, ciri-ciri utama penyeliaan pengajaran dan pembelajaran yang berjaya dan faktor-faktor-faktor yang mempengaruhi kejayaan penyeliaan pengajaran dan pembelajaran dan implikasinya. Melalui kajian lepas telah menunjukkan salah satu syarat sesebuah sekolah untuk menjadi sekolah yang berkesan ialah melalui penyeliaan yang kerap dan berkesan namun aktiviti penyeliaan dan pencerapan pendidikan di sekolah masih belum benar-benar meresap di dalam jiwa warga sekolah terutamanya pihak pentadbir dan guruguru untuk menjadikannya suatu budaya ke arah penambahbaikan yang berterusan. Kerangka konseptual bagi kajian ini menggunakan Model Penyeliaan Instruksional dan Sekolah Berjaya oleh Glickman, Gordon & Ross- Gordon (2010) yang menekankan peranan pentadbir sekolah untuk melengkapkan diri dengan ilmu pengetahuan, kemahiran interpersonal dan kemahiranteknikal yang tinggi sebagai penyelia dalam memastikan semua warga sekolah bergabung tenaga untuk mentransformasikan sekolah sebagai institusi yang efektif. Melalui kajian ini dapat memberi manfaat kepada guru-guru untuk memperbaiki kualiti mutu pengajaran dan pembelajaran di dalam kelas dalam usaha untuk melahirkan pelajar yang berpengetahuan dan berkemahiran tinggi seterusnya menyiapkan mereka ke alam pekerjaan selaras dengan Revolusi Perindustrian 4.0.

Kata kunci: Penyeliaan pengajaran dan pembelajaran, Model Penyeliaan Instruksional dan Sekolah Berjaya

# **DEVELOPMENT OF AUGMENTED REALITY LEARNING APPLICATION ON GEOMETRY TOPIC FOR PRIMARY SCHOOL STUDENTS**

Mohamad Basri Nadzeri, mohamadbasri@student.usm.my, Universiti Sains Malaysia  
Chew Cheng Meng, cmchew@usm.my, Universiti Sains Malaysia

## **ABSTRACT**

Technology in the classroom should be applied by teachers and students to be prepared with knowledge and skills that can provide positive impact in teaching and learning. Moreover, the Malaysia Education Blueprint 2013-2025 was developed by the Ministry of Education emphasizes on the use of technology and innovation. However, primary schools' students face difficulties in learning geometry. One of the main factors affecting the understanding of geometry concepts is poor visual skills. The review findings show that Augmented Reality can enhance students' visual-spatial ability and 3D visuals in real time are used in Augmented Reality to develop spatial imagination in geometry. In addition, the use of Augmented Reality applications is widely practiced in education. In this regard, the application utilizing Augmented Reality (AR) technology was developed for year 2 students as a teaching and learning tools. This study used ADDIE's instructional design model as a framework to develop the application. This study is expected that the AR technology applied can improve the effectiveness of learning and enhance the visual spatial ability in geometry topic.

Keywords: geometry, visual skills, ADDIE, Augmented Reality

# **ONLINE TEACHING DURING THE COVID-19 PANDEMIC: A NEW EXPERIENCE IN SECONDARY SCHOOLS EDUCATION**

Nurul Ashikin Izhar, shikinizhar@gmail.com, Universiti Sains Malaysia  
Yahya M. Al-dheleai, yamohd3@gmail.com, Universiti Sains Malaysia

## **ABSTRACT**

The COVID-19 pandemic has exposed the education realm to be adaptive and flexible in changing the education strategies such as reframing the curriculum, home-based learning, television educational programs and cancellations of national examinations are among the strategies to loosen the tensions happening in education. A massive advancement of the industrial revolution (I.R 4.0) in education, the realm has seen the shift from physical face-to-face to online education for the purpose of continuing teaching and learning. Nevertheless, before the pandemic, technology such as the utilization of online tools were only part of teaching process. Thus, the implementation of online teaching as education continuation strategies during the school closure to curb the spread of COVID-19 is new to educators who seldom or never used such approaches in their instructional strategies. Moreover, microscale to common intrinsic challenges among Asian countries such as Indonesia, Brunei, Malaysia, and the Philippines were the educator's readiness, and extrinsic as technological infrastructure, Internet connectivity, students' readiness, and students' responses. Despite that, the challenges open up the opportunity for the professional development of educators with the online teaching training. Thus, it is recommended that further research be conducted to investigate the teachers' involvement in the conducted training to expedite the strategies, the impact of initiatives on educators and how it helps them in their online teaching. Besides, challenges also arose based on students' aspects, thus further research could also look upon strategies in elevating student readiness for online learning, the digital and technology literacy among students, and students initiatives and discipline for their own learning. Moreover, as online teaching and learning involved devices and the Internet, specific allowances for teachers could be considered with the collaboration of government and telecommunications providers. The allowances will help teachers to have stable Internet connectivity to accommodate numbers of students per class session, access to premium teaching software and more. In conclusion, further research to improve the educational experiences of teaching presence, social presence, cognitive presence, and the intersection of each element are imperative on the current education intervention.

Keywords: education continuation strategies; COVID-19 pandemic; online teaching and learning; teaching and learning; emergency remote teaching

# PELAKSANAAN PENGAJARAN DAN PEMBELAJARAN DALAM TALIAN (PDPDT): CABARAN YANG DIHADAPI PELAJAR POLITEKNIK METRO JOHOR BAHRU

Hasnida Ibrahim, [hasnidaibrahim83@gmail.com](mailto:hasnidaibrahim83@gmail.com), Politeknik METrO Johor Bahru  
Hamdan Zakaria, [padeluah@gmail.com](mailto:padeluah@gmail.com), Politeknik Tuanku Syed Sirajuddin

## ABSTRAK

Pandemik COVID-19 di Malaysia telah mewujudkan norma baharu dalam pelbagai sektor termasuklah sektor pendidikan. Arahan pelaksanaan pengajaran dan pembelajaran dalam talian (PdPDT) secara drastik dilihat amat sukar untuk diterima, namun norma baharu dalam proses pengajaran dan pembelajaran ini wajar dinormalisasikan bagi mengekang penularan pandemik COVID-19. Sehubungan itu, kajian ini dijalankan bagi mengenalpasti cabaran-cabaran yang dihadapi oleh pelajar Politeknik METrO Johor Bahru semasa melalui pembelajaran dalam talian. Peserta kajian terdiri daripada 6 orang pelajar politeknik METrO Johor Bahru yang dipilih menggunakan pensampelan bertujuan. Pendekatan yang diambil dalam kajian ini adalah kajian secara kualitatif iaitu melalui kaedah temu bual dalam talian dan analisis dokumen berasaskan kategori kodifikasi yang diambil dari tinjauan literatur. Hasil kajian menunjukkan terdapat empat tema utama cabaran yang dihadapi pelajar semasa pembelajaran dalam talian iaitu pelajar tidak memiliki kemahiran pembelajaran sepanjang hayat, capaian internet, persekitaran pembelajaran tidak kondusif dan tidak mempunyai peranti khusus untuk pembelajaran. Implikasi kajian ini adalah mengambil kira pembelajaran dalam talian merupakan penyelesaian terbaik bagi menghadapi norma baharu, diharapkan semua pihak terutamanya pengurusan politeknik berganding bahu merangka polisi atau plan kontingensi membantu pelajar dalam mendepani cabaran-cabaran ini ke arah merealisasikan pembelajaran dalam talian yang lebih baik.

**Kata kunci:** Pembelajaran dalam talian, cabaran pelajar, pelajar Politeknik METrO Johor Bahru

## **PDPR AND COVID-19:WHAT'S THE POINT OF GOING TO SCHOOL?**

Nur Farhana binti Mohd Jais, nurfarhana.jais@gmail.com, Maahad Integrasi Tahfiz Selangor Sabak Bernam

Murni binti Abdullah, alifat86@gmail.com, Maahad Integrasi Tahfiz Selangor Sabak Bernam

### **ABSTRACT**

The Covid-19 outbreak has caused major changes in the educational field. The traditional face-to-face classes have been replaced with home-based learning, or PdPR, which became the new norm in recent years. PdPR is typically delivered online, both synchronously and asynchronously. Education should remain positive and accommodating, since it is critical to maintain the relevance of teaching and learning in any situation. Hence, this study is crucial since PdPR is currently leading the educational trend. Previous research has identified the elements influencing the efficacy of online learning in terms of students' social communication, students' demands, and the obstacles and issues generated during this pandemic. The goal of this study was to identify if there was still a demand for face-to-face classes once the Covid-19 pandemic ended in the future, especially because the Sijil Pelajaran Malaysia (SPM) result for 2020 indicated an increase in candidates' achievement. The participants of this study consisted of 63 SPM year 2020 students from a school in northern Selangor, Malaysia. To reach the study's aim, this study used a survey design with a questionnaire. The findings of the investigation suggested that face-to-face sessions were still required, since students discovered that it was difficult to learn without the actual meetings. Thus, it is concluded that face-to-face classes should be resumed after the pandemic ends, no matter what the national examination results showed.

Keywords: PdPR, home-based learning, Covid-19, face-to-face, achievement

# INVESTIGATING ENGLISH LANGUAGE SPEAKING ANXIETY AMONG PRIMARY SCHOOL STUDENTS DURING COVID-19 PANDEMIC AND TEACHERS' PERCEPTION ON GOOGLE CLASSROOM

Punithavathy Rajaindaran, [punitha25984@gmail.com](mailto:punitha25984@gmail.com) Universiti Sains Malaysia.

## ABSTRACT

This study investigates English Language Speaking anxiety among primary school students during the Covid-19 pandemic. Anxiety is not a taboo topic and there are myriad researches on English language speaking anxiety, however, there is no study done in identifying the students level of speaking anxiety during the outbreak, where face-to-face learning was made impossible. Therefore, this mixed method study, investigates primary school students English Language Speaking anxiety level, identifies if there is any difference in the anxiety level between male and female students and to ascertain if there is any relationship between speaking anxiety and their School Based Assessment(SBA) results. This study also explored the teachers' role in coping with English speaking anxiety among primary students by looking at their perceptions on Google Classroom. A total of 175 primary students participated in this study and three teachers were interviewed. Results of this study showed that these students experienced medium level of anxiety in speaking lessons during the outbreak. There was no statistically significant difference of anxiety level between male and female students. There was a low negative correlation between speaking anxiety and their SBA results. Teachers were aware of students anxiety in speaking English and from the interview data there were new insights, where teachers shared how technology actually helped to reduce anxiety among students which they believe, the students' speaking anxiety would be in high level during face-to-face learning. This research will provide new ideas for teachers to conduct speaking lessons which can reduce speaking anxiety among primary school students.

Keywords: anxiety, second language anxiety, speaking anxiety, oral performance, SBA

# **COVID-19 PANDEMIC CHALLENGES FOR UNDERGRADUATE INTERNATIONAL STUDENTS IN HUNAN INSTITUTE OF SCIENCE AND TECHNOLOGY IN A FLIPPED CLASSROOM ENVIRONMENT**

Ma Rui, marui2021@student.usm.my, Universiti Sains Malaysia  
Samah Ali Mohsen Mofreh, samahmofreh@usm.my, Universiti Sains Malaysia

## **ABSTRACT**

The use of flipped classrooms is becoming increasingly popular in higher education. The emergence of the coronavirus (COVID-19) is putting unsustainable strains on distant learning. Teachers are being given only weeks to put their courses online due to the closing of schools and institutions, despite their lack of online experience and assistance. The combination of flipped classroom and MOOC provides great convenience for both teachers and students. However, most of the existing research on this topic is quantitative and focuses on domestic students. Little is known about undergraduate international students' flipped classroom learning experiences in China. Based on 20 interviews with undergraduate international students at Hunan Institute of Science and Technology, this research investigates undergraduate international students' issues in a flipped classroom environment. We discovered a number of obstacles, including language barriers, barriers to self-directed learning, and technical and technological challenges. In addition, international students in our study make constructive suggestions for improving the flipped classroom's design. This paper adds to our understanding of the complexities of undergraduate international students' challenges in a flipped classroom setting.

Key words: undergraduate international students, Flipped classroom, COVID-19



# **THE EXTENT OF THE EFFECTIVENESS OF AN ASYNCHRONOUS TRAINING PROGRAM IN DEVELOPING THE NEW TEACHERS' PERFORMANCE IN THE SULTANATE OF OMAN FROM THE TRAINERS' POINT OF VIEW**

Wadhha Abdullah Alsaadi, [Wadha6042@moe.om](mailto:Wadha6042@moe.om), Universiti Sains Malaysia  
Dr.Yahya Mohammed Al-Deleai, [yahya.aldheleai@usm.my](mailto:yahya.aldheleai@usm.my) , Universiti Sains Malaysia.

## **ABSTRACT**

The tracker of the efforts made by the Sultanate of Oman in the field of teacher development can monitor a number of influential educational renovations, and among those renovations is the establishment of the Specialized Institute for professional Training of Teachers(SIPPT) in 2014, which provides specialized training programs for teachers. Those training programs are characterized by continuity, where the duration of training in Some long-term programs to two years. The training system at the (SIPPT) is also integrated, as it combines F2F training, asynchronous electronic training, and training in the work environment. The New Teachers Program is one of the long-term programs, with a training period of one year. In which the trainees' performance is evaluated through a set of tasks they are required to complete during the training period. According to the statistics of the Evaluation and Accreditation Department (EAD), the number of trainees in the New Teachers (NT)Program reached 1401 trainees during the year 2020. The results of the (EAD)showed that the percentage of tasks completed in F2F training was 100%, while the percentage of task delivery in asynchronous electronic training and training in the workplace 77%, and the number of trainees who passed the training program reached 1084 trainees. This study aims to verify the effectiveness of the asynchronous electronic training in the work environment on trainees' performance. The study aim to investigate the trainers' point of view on the role of the trainers' and the training content on the asynchronous electronic training in the work environment. To achieve the research aims, researcher will follow the qualitative approach using the interview tool to collect the responses from the targeted sample. The respondents in this study are six trainers from the New Teachers Program at the Specialized Institute for Vocational Training for Teachers. Through this study, the researcher will identify the strengths and weaknesses of the program so that the electronic training program designers and developers can develop the training programs that improve teachers' performance.

Keyword: asynchronous training, E-training, Workplace training, Performance, New teachers, Trainer, Training content.

# PSYCHOLOGICAL PROBLEMS AND COUNTERMEASURES IN CHINESE COLLEGE STUDENTS' CAREER PLANNING

Gao Ping, gaoping@student.usm.my, Universiti Sains Malaysia  
Shahabuddin bin Hashim, Shah@ usm.my, Universiti Sains Malaysia

## ABSTRACT

With the transformation of higher education from elite to mass, the number of college graduates in China has been increasing in recent years. At the same time, the slowdown of economic development has led to the reduction of jobs. Facing the severe employment situation, many college students inevitably arise psychological problems in career planning. Effectively solving these psychological problems, helping college students to establish a positive employment attitude is an important part of the Chinese higher education. This study focuses on the psychological problems of college students' career planning, analyzes the causes of the problems, and then puts forward countermeasures, hoping to provide valuable reference for college students. Through interviews, questionnaires and other forms, we can know that there are psychological problems such as anxiety, inferiority, dependence, conceit, comparison and blind obedience in college students' career planning. Psychological problems in career planning are closely related to gender, major and family economic conditions. The reasons behind that mainly include three aspects: standardized employment system is ignored by the government, the guiding work of career planning is not sufficient in universities and the students are of dissonance cognitively on themselves when choosing a career. Based on that, we can improve the situation by formulating effective laws and systems, establishing career planning support department and relevant staff team in universities and using psychological measurement to evaluate individuals. College students should recognize the situation clearly, face up to the social reality, constantly update the concept of choosing a job, pay attention to the realization of personal value and its combination with social needs, and focus on the long-term development of individuals.

Key words: college students; career planning; psychological problems; countermeasures

# A SYSTEMATIC LITERATURE REVIEW OF EMOTION LANGUAGE AND EMOTION REGULATION IN CHILDREN WITH LANGUAGE IMPAIRMENT

Zakirah Mohd Hatta, [zakirah.zmht@student.usm.my](mailto:zakirah.zmht@student.usm.my), Universiti Sains Malaysia  
Shahabuddin bin Hashim, [shah@usm.my](mailto:shah@usm.my), Universiti Sains Malaysia

## ABSTRACT

The current review gathers research investigating emotion language to give an overview of the limitations experienced by children with language impairment to regulate emotions. This systematic review aims to fill the gap by summarising the literature that established the link between emotion language and emotion regulation in children with language impairment. A systematic searched of Dimension database identified 45 papers that met restrictions in year of publication between 2010-2021 with search string of “*emotion language*”, “*emotion regulation*”, “*language impairment*”. Bibliometric analysis shown the top 3 of years published with the highest number of publication in 2019, 2018 and 2014 are 7, 6, 9 total papers published respectively. The selection criteria accounted for papers incorporating together between emotion language, emotion regulation in children who has difficulties in language and communication skills yield 10 papers. Little information is available about the integration between emotion language, emotion regulation and language impairment. These components and their specific interrelations have not been studied sufficiently. Previous findings suggest children with language impairment may need to achieve a certain level of mastery with language and emotion regulation separately. Language acquisition throughout early childhood leads to increased emotion understanding. Emotion language impairment is associated with difficulty in understanding emotional concepts. It is encouraging to find research that comprehensively focused on emotion language that will help us better understand how children with language impairment become aware of their emotions and develop effective regulatory strategies and appropriate emotion regulation.

Keywords: emotion, language, emotion regulation, language impairment

# **PENGGUNAAN APLIKASI LAMAN INTERAKTIF MORAL (LIMA) DALAM MATA PELAJARAN PENDIDIKAN MORAL.**

Nurul 'Ain Abdul Halim, [nurulain2685@gmail.com](mailto:nurulain2685@gmail.com), *Universiti Sains Malaysia*

Shahabuddin Hashim, [shah@usm.my](mailto:shah@usm.my), *Universiti Sains Malaysia*

Mohamad Rasyidi Ghazali, [rasyidighazali@gmail.com](mailto:rasyidighazali@gmail.com), *Universiti Sains Malaysia*

Bibi Nadiah Yaakub, [bizarizka@gmail.com](mailto:bizarizka@gmail.com), *Universiti Sains Malaysia*

Yap Chiou Shum, [chioushumyap@gmail.com](mailto:chioushumyap@gmail.com), *Universiti Sains Malaysia*

## **ABSTRAK**

Pendidikan moral adalah mata pelajaran yang wajib diambil oleh murid bukan Islam di peringkat Sijil Pelajaran Malaysia (SPM). Walaupun 'wajib', sebilangan murid dilaporkan tidak memberi tumpuan yang sepenuhnya sewaktu pembelajaran dalam kelas ataupun atas talian. Mereka juga terikat dengan jadual waktu yang telah ditetapkan dan aktiviti lain yang diberikan oleh guru. Selain itu, murid juga dilihat tidak mempunyai minat sewaktu proses pengajaran dan pemudahcaraan (PdPc) Pendidikan Moral berlangsung. Motivasi pembelajaran Pendidikan Moral juga menurun. Berdasarkan pernyataan masalah di atas, Aplikasi Laman Interaktif Moral (LIMa) telah dibina. Objektif inovasi ini adalah untuk menggalakkan murid mengikuti pembelajaran sendiri dan untuk meningkatkan motivasi pembelajaran Pendidikan Moral dalam kalangan murid yang mengambil mata pelajaran pendidikan moral. Pembangunan aplikasi ini menyediakan satu alternatif kepada murid untuk meneruskan pembelajaran mengikut kesesuaian masa dan lokasi masing-masing. Dapatan kajian telah mendapati bahawa motivasi pembelajaran Pendidikan Moral telah meningkat setelah murid menggunakan aplikasi LIMa dalam pembelajaran mereka. Aplikasi LIMa juga meningkatkan pembelajaran sendiri terutamanya dari aspek kecekapan penggunaan masa secara optimum oleh murid. Kerangka pembinaan laman yang sama boleh disesuaikan untuk pembinaan sumber pendidikan dalam subjek-subjek yang lain yang ditawarkan di sekolah, samada untuk murid tahap menengah rendah dan menengah atas. LIMa juga berpotensi untuk dilaksanakan di sekolah yang lain yang mempunyai murid bukan Islam di bawah Kementerian Pendidikan Malaysia (KPM) dan juga di sekolah swasta.

Kata kunci: Laman Pembelajaran Interaktif, Pendidikan Moral, Pembelajaran Kendiri, Motivasi Pembelajaran Pendidikan Moral

# **REKA BENTUK PENTAKSIRAN KENDIRI BILIK DARJAH (PKBD) - PENTAKSIRAN KEMAHIRAN MENULIS BAHASA MELAYU TAHUN 1**

Bibi Nadiyah Yaakub , bizarizka@gmail.com , Universiti Sains Malaysia  
Shahabuddin Hashim, shah@usm.my, Universiti Sains Malaysia  
Norazam Ariffin , na@usm.my , Universiti Sains Malaysia  
Abd Haris Harun , hariszharun@gmail.com , Universiti Sains Malaysia  
Nurul 'Ain Abdul Halim , nurulain2685@gmail.com , Universiti Sains Malaysia  
Yap Chiou Shum , chioushumyap@gmail.com , Universiti Sains Malaysia

## **ABSTRAK**

Pentaksiran bilik darjah (PBD) merupakan satu sistem pentaksiran yang dapat memberikan maklumat tentang perkembangan dan kemajuan murid dengan tidak berorientasikan peperiksaan. Justeru, pelaksanaannya boleh dipelbagaikan mengikut kesesuaian dan tahap kesediaan murid. Bagi subjek Bahasa Melayu, terdapat 5 kemahiran yang perlu ditaksir supaya perkembangan murid dapat dilihat secara menyeluruh dan seimbang iaitu Kemahiran Mendengar dan Bertutur, Kemahiran Membaca, Kemahiran Menulis dan Aspek Seni Bahasa. Namun begitu, sehingga hari ini, sistem pengurusan dan pengendalian PBD ini masih lagi menggunakan cara konservatif bermula daripada peringkat awal iaitu penyediaan instrumen pentaksiran, pelaksanaan dan juga perekodan. Bahkan peringkat tindakan susulan (aktiviti pengukuhan dan pengayaan) sering kali diabaikan disebabkan sistem analisis dan pelaporan sedia ada tidak begitu sistematik. Sehubungan itu, Reka Bentuk PKBD : Pentaksiran Kemahiran Menulis Bahasa Melayu Tahun 1 ini telah dibangunkan dan ia berupaya menyatukan kesemua proses pentaksiran yang perlu dilakukan di dalam satu aplikasi sahaja. Lebih menarik lagi, Reka Bentuk PKBD ini membolehkan murid-murid melaksanakan pentaksiran pada bila-bila masa tanpa mengira lokasi. Dalam erti kata lain, pentaksiran tidak semestinya berlaku secara bersemuka dengan guru yang mengajar. Bagi pihak guru dan pentadbir pula, Reka Bentuk PKBD ini memudahkan mereka untuk mencapai maklumat yang tepat tentang prestasi pencapaian murid dengan serta merta. Secara tidak langsung, guruguru dapat merancang aktiviti pengukuhan dan pengayaan berdasarkan maklumat yang didapati daripada paparan dashboard PKBD. Reka Bentuk PKBD ini adalah relevan digunakan di semua sekolah-sekolah rendah awam mahupun swasta, pihak PPD serta JPN memandangkan penilaian adalah aspek yang merupakan satu kemestian bagi menentukan hala tuju sesebuah sistem pendidikan.

Kata kunci : Pentaksiran Bilik Darjah, kemahiran menulis Bahasa Melayu Tahun 1

# ESL STUDENTS' SELF-REGULATION IN ONLINE LEARNING ENVIRONMENT DURING COVID-19 PANDEMIC: PSYCHOMETRIC ANALYSIS

Samah Ali Mohsen Mofreh, [samahmofreh@usm.my](mailto:samahmofreh@usm.my), Universiti Sains Malaysia, Malaysia  
Sultan Salem, [s.salem@bham.ac.uk](mailto:s.salem@bham.ac.uk), University of Birmingham, UK

## ABSTRACT

The outbreak of the Covid-19 pandemic has caused school closure across the world which resulted in a drastic change in education. Consequently, ESL students like others are compelled to migrate their on-site learning to e-learning platforms. Learning through this medium requires one to be self-regulate their learning. In this unanticipated novel predicament, the urgency for the employment of self-regulation is intensified as studies have reported that learning in such a situation is very challenging. For online learning, the quality can be ascertained by measuring students' self-regulation. However, no valid and reliable instrument is available to measure the students' self-regulation during a pandemic such as the COVID- 19. Hence, taking into consideration the importance of self-regulation on students' performance and the dearth of research on online self-regulation. Thus, this study aims to study the psychometric properties scale of the ESL students' self-regulation in an online learning environment during the COVID-19 pandemic. The sample of this study consisted of 100 students of the second year from the TESOL program. A quantitative online survey method was employed as a design in this study. The psychometric properties of the developed self-regulation instrument were tested using the Rasch Model Analysis and Confirmatory Factor Analysis. The findings of analysis Rasch Model Analysis suggest that six items out of 54 items should be omitted due to their difficulty index with good reliability index. Therefore, the findings of Confirmatory Factor Analysis show that the analysis of the validity and reliability confirm that the model fits the data analysis of the Rasch model analysis. The findings suggest that the developed instrument can be used to assess the students' self-regulation in online learning during a pandemic such as the COVID- 19.

Keywords: Self-regulation, Online Learning Environment, COVID-19 Pandemic, Psychometric analysis, Rasch Model Analysis, Confirmatory Factor Analysis

# **PRE-COVID PERCEPTION OF ONLINE EDUCATION IN UNIVERSITY OF GHANA'S COLLEGE OF EDUCATION**

Abdallah Yussif, abdyussif@student.usm.my, Universiti Sains Malaysia

## **ABSTRACT**

The research was conducted before the outbreak of the covid-19 to find out the perception of some administrators, lecturers and students of the College of Education at University of Ghana (Legon) regarding online learning in higher education. The limitation of distance, time and space has barred a lot of high school graduates from progressing in their education. However, perceptions built on rumors and misconceptions have left many wondering the authenticity and credibility of online education. This has raised a lot of debates among academicians as to promote the embrace of online education specifically in higher education or not. Through purposive sampling, data was taken from 18 respondents comprising of administrators, lecturers and students of the college through interviews. The data was thematically analyzed under three themes. The understanding of online learning, solutions to online learning challenges in Ghana and the best online learning option for Ghana were the themes used. The findings showed that respondents had good understanding of online learning, its types, advantages and challenges in the context of Ghana. They proposed practical and implementable ways to enhance the acceptance of online learning in Ghana. The research also found out that blended or hybrid mode of online education is perceived to be the best for Ghana. It was known during the research that the University has an online learning platform known as SAKAI of which students were not patronizing effectively. The research concluded on the fact that online education is understood by the target population but their perceptions are influenced by the challenges it presents. It therefore recommended a further research on the use of SAKAI by students of the University.

Keywords: Online education, Higher education, Perception, Pre-Covid

# **SERVANT LEADERSHIP: A REVIEW AND SYNTHESIS**

Abdul Latheef Ali, latheef@student.usm.my, Universiti Sains Malaysia  
Al-Amin Mydin, alamin@usm.my, Universiti Sains Malaysia

## **ABSTRACT**

Current researches in leadership are in the race towards promising hope in organization management. Servant leadership is gradually finding root that revolves around organizational philosophies based on ethical and spiritual values. This study aims to acknowledge the varied nature of research that tends to prove servant leadership as a leadership model, a theoretical concept, and a predictor of behavioral factors at organizational, individual, and group levels to carry out replicative, structured, and systematic study technique effective to review the literature. Lastly, different studies on leadership servants got selected from various authors and publishers. The findings showed different definitions of servant leadership by different authors' central argument landing on self-less service. Most of the studies self-expressed themselves among the contextual culture of the Western countries. Also, servant leadership theory seems to exhibit a robust correlation with levels of individual cognitive and psychological degree factors. The implication and application of servant leadership depend on organizational, group, and individual levels of standards. It also classifies itself as satisfaction, well-being, higher performance, and mental health. The study gets a conclusion by giving a summary of servant leadership as a futuristic and holistic means that can manage most organizations. Development and insights about the study of servant leadership as modern organizations' philosophy get addressed in this paper.

Keywords: Organizations, Systematic Literature Review (SLR), Leadership, Servant Leadership Models, Servant Leadership.



# **PEMBANGUNAN MODUL PENGAJARAN DAN PEMBELAJARAN TOPIKAL BERPOLA (TOPO) DAN KESANNYA KE ATAS PENCAPAIAN SERTA SIKAP PELAJAR TINGKATAN 4 TERHADAP TAJUK KEBARANGKALIAN PERISTIWA BERGABUNG**

Pahwazull Khair Bin Shafie, [pahwazullkhair@student.usm.my](mailto:pahwazullkhair@student.usm.my), Universiti Sains Malaysia  
Dr. Wun Thiam Yew, [tywun@usm.my](mailto:tywun@usm.my), Universiti Sains Malaysia

## **ABSTRAK**

Penyelidikan mengenai proses latih tubi telah membuktikan bahawa semakin banyak Latihan dalam matapelajaran matematik khususnya dan Pendidikan amnya akan membuahkan hasil yang baik. Namun harus kita sedari bahawa latih tubi juga mestilah berpola supaya semua kemahiran dan pelajaran mampu dikuasai. Hasilnya, tujuan kajian ini adalah untuk membangunkan dan menguji pendekatan penggunaan modul topikal berpola (ToPo) sebagai kaedah alternatif untuk menguasai tajuk Kebarangkalian Peristiwa Bergabung Matematik tingkatan 4, KSSM dengan semaksima yang mungkin. Kajian ini menggunakan reka bentuk kajian pembangunan modul ToPo dan melibatkan dua fasa perlaksanaannya. Fasa pertama melibatkan fasa pembangunan modul ToPo berasaskan model ADDIE. Manakala fasa kedua pula menggunakan reka bentuk kuasi eksperimen ujian pra-pos kumpulan kawalan tidak setara ke atas 35 orang pelajar tingkatan 4 dalam sebuah kelas di sebuah sekolah di Daerah Larut, Matag dan Selama yang dipilih secara Teknik persampelan kluster. Kajian ini juga disokong oleh kaedah kualitatif iaitu borang soal selidik persepsi pelajar dan temu bual persepsi guru terhadap modul ToPo ini. Data dikumpulkan menggunakan 6 instrumen iaitu soal selidik sikap pelajar terhadap tajuk Kebarangkalian Peristiwa Bergabung, ujian pencapaian pelajar terhadap tajuk Kebarangkalian peristiwa bergabung, soal selidik pengekalan sikap pelajar terhadap tajuk Kebarangkalian Peristiwa Bergabung, ujian pengekalan pencapaian pelajar terhadap tajuk Kebarangkalian Peristiwa Bergabung, soal selidik persepsi pelajar terhadap tajuk Kebarangkalian Peristiwa Bergabung dan temu bual persepsi guru terhadap tajuk Kebarangkalian Peristiwa Bergabung. Data dianalisis secara deskriptif dan inferens menerusi Ujian-t Sampel bebas (Ujian ANCOVA akan digunakan sekiranya terdapat perbezaan min yang signifikan dalam ujian pra. Selain itu min dan sisihan piawai serta analisis kualitatif bertema juga digunakan untuk analisa persepsi. Analisa dibandingkan dengan kumpulan kawalan. Kajian ini berjaya membangunkan modul ToPo yang mempunyai kesahan dan kebolehpercayaan indeks tinggi. Dapatan kajian rintis menunjukkan hasil yang cukup positif dengan nilai Alpha Cronbach untuk item soal selidik sikap ialah 0.923 manakala untuk ujian pencapaian pula nilai Alpha Cronbach ialah 0.81.

Kata kunci : Modul Topikal Berpola, modul pembelajaran kebarangkalian peristiwa bergabung

# **EXHIBITIONS AS LEARNING ENVIRONMENTS: A CASE STUDY ON PARENT'S PERCEPTION ON NON-FORMAL LEARNING AT KINTA TIN MINING (GRAVEL PUMP) MUSEUM**

Muthualagan Thangavelu, [muthualagan.thangavelu@qiup.edu.my](mailto:muthualagan.thangavelu@qiup.edu.my)  
Quest International University (QIU)

## **ABSTRACT**

A museum is a non-profit making, permanent institution in the service of society and its developments, and open to the public, which acquires, conserves, researches, communicates, and exhibits, for purpose of study, education and enjoyment, material evidence of people and their environment. Museums today are faced with a number of challenges and are currently searching for ways to attract and retain audiences and engage with the public. In order to address these issues, researchers have called for studies to help construct a more complete understanding of the visitor experience through non-normal learning. Few studies employ methodological approaches that provide in-depth accounts of the museum experience. This article reports findings from a qualitative research study that aimed to explore sustained parents' views on nonformal learning that occurs in museum. Hence, the narrative methodology adopted for this study provides novel insights into the nature of perception and extends our understanding of those museum experiences that build and strengthen relationships with visitors. As is evident from the results of this study, museums are generally seen as a good opportunity for learning; however, there are many obstacles that parents face. This section provides recommendations for future practices for both museum educators and institutions, with the goal of being able to better support the learning and personal goals.

Keywords: learning, parents, museum

# **VOCATIONAL EFL TEACHERS' PERCEPTION TOWARD THE OBSTACLES FACED IN EMERGENCY REMOTE TEACHING AMIDST THE COVID-19 PANDEMIC IN BALIKPAPAN**

Hermansyah and Aridah

## **ABSTRACT**

Due to the COVID-19 outbreak in early 2020, all schools have closed to stop the spread of the virus. The learning process is carried out from home by utilizing various kinds of platforms and applications in Indonesia. This research aims to describe the vocational EFL teachers' perception of the obstacles and solutions to overcome the obstacles they faced in Emergency Remote Teaching (ERT) amidst the COVID-19 pandemic in Balikpapan, East Kalimantan. An explanatory sequential mixed-methods design was used since both quantitative and qualitative data were needed. Fifty vocational EFL teachers in Balikpapan, East Kalimantan participated in this research. The Data were collected from an online questionnaire, and the result is all vocational EFL teachers perceived the obstacles of ERT but the top five rankings were measured based on the highest mean score. Followed by online interviews from selected five participants, the data from online interviews were interpreted thematically. Five themes emerged from online interview data, namely the mastery of digital platforms, teachers' pedagogy, time management, creativity, and motivation. Some of them faced the same obstacle while some were different. Even though the vocational EFL teachers' faced the same obstacles, they overcame the obstacles they faced in ERT in different ways. By knowing the obstacles and solutions to overcome the obstacles the vocational EFL teachers faced in ERT can be useful in the future so they are always ready when faced with a situation like ERT or other crisis circumstances.

**Keywords:** Emergency Remote Teaching, Obstacles, Perception, the COVID-19 Pandemic, Vocational EFL Teachers

# RESPONSE OF SMA BIOLOGY TEACHERS ABOUT THE APPLICATION OF THE LEARNING MODEL BASED ON SCIENTIFIC APPROACH

Didimus Tanah Boleng<sup>1\*</sup>, Elsjie Theodora Maasawet<sup>2</sup>

<sup>1,2</sup>Biology Educational Studi Program, Teacher Training and Education, Mulawarman University

\*Correspondence Author: [didimus.tanahboleng@yahoo.com](mailto:didimus.tanahboleng@yahoo.com)

## ABSTRACT

The policy that has been adopted by the Ministry of Education and Culture, Republic of Indonesia is the implementation of the 2013 curriculum. In the curriculum, a scientific approach-based learning model is applied in high school. There is no information about the difficulties and obstacles in implementing this curriculum by biology teachers. Descriptive research has been conducted on high school teachers in the odd semester of the 2020/2021 academic year in Samarinda City, Indonesia. The purpose of the study was to find out the responses of biology teachers regarding the application of learning models based on the scientific approach such as Problem-Based Learning, inquiry, and others. The purpose of the study was to find out the responses of biology teachers regarding the application of learning models based on the scientific approach. The sampling technique is purposive sampling. The research instrument is a questionnaire. The technique of data analysis used descriptive analysis (percentage). The results of data analysis showed that most (63.3%) of respondents already knew learning models based on the scientific approach, 73.34% of respondents expected a laboratory and tools and materials for practicum, 73.34% of respondents said the obstacles to implementation in learning were the lack of laboratories and tools. and materials for practice. The conclusion is that most of the teachers already know learning models based on the scientific approach, but their implementation is often hampered due to lack of facilities for practicum. Further research, it is necessary to enlarge the sample in order to obtain more information.

Keywords: Teacher, Biology, Learning model, Scientific approach

# **LEADERSHIP OF THE PRINCIPAL IN PLANNING FOR THE QUALITY DEVELOPMENT OF TEACHER RESOURCES AT SMP NEGERI 2 SEBULU KUTAI KARTANEGARA**

James Marpaung, Zaenab Hanim and Rahmat Soe'Oed

## **ABSTRACT**

This study aims to describe the role of principal leadership in planning the development of the quality of teacher resources at SMP Negeri 2 Sebulu Kutai Kartanegara. Related to the role of principal leadership in planning, implementing, evaluating planned programs in developing the quality of teacher resources. This research uses a qualitative approach with this type of research, namely a case study. Data collection techniques through observation, interviews and documentation. Data analysis used the Miles & Huberman model, which includes data collection, data reduction, data presentation, and drawing conclusions. The results showed: (1) planning for the development of the quality of teacher resources was carried out by deliberation in internal meetings; (2) the form of developing the quality of teacher resources, namely the implementation of workshops, training, seminars and advanced education levels; (3) evaluating by conducting academic supervision; (4) the role of the principal as educator, managers, administrator, supervisors, leader, innovator; and motivators. Based on the results of interviews with three informants about the principal's leadership in planning the development of the quality of teacher resources, the principal as a leader has tried to carry out according to procedures in determining planning, namely by involving stakeholders in internal school meetings. In the implementation process, it is carried out in accordance with the procedure, all the steps taken by the principal and the teacher are to begin with the formation of a school development team, each school development team is given a mandate according to its capacity. In the implementation of the development of the quality of teacher resources, it has been carried out optimally, both in terms of teacher professionalism, teacher careers, teacher health and teacher welfare in order to achieve common goals. Then evaluate which is one of the important aspects in education management. Through evaluation, various accurate inputs will be obtained regarding the feasibility of the program, the readiness of human resources and supporting facilities, the accuracy and effectiveness of the program implementation process, and the achievement of the results.

Keywords: principal leadership, planning, development, quality of teacher resource

# **DEVELOPMENT OF LEARNING MEDIA BASED ON ANDROID SMART APPS CREATOR FOR ECOSYSTEM MATERIALS WITH 4C (CRITICAL THINKING, CREATIVITY, COLLABORATION, COMMUNICATION)**

Herlan Perdana Putra, [herlan.lover@gmail.com](mailto:herlan.lover@gmail.com), the University of Mulawarman  
Elsje Theodora Maasawet, [emaasawet@gmail.com](mailto:emaasawet@gmail.com), the University of Mulawarman  
Muh. Amir Masruhim, [nurergaamir@yahoo.com](mailto:nurergaamir@yahoo.com), the University of Mulawarman

## **ABSTRACT**

This study aims to design learning media, see the validity, practicality, and effectiveness of the development of learning media Smart Apps Creator Android. The output produced is the "My Ecosystem" application product from the development of SAC Android media on ecosystem materials with 4C (Critical Thinking, Creativity, Collaboration, and Communication). The type is research and development (R&D) with a needs analysis method. The needs analysis using a virtual questionnaire or Google form. From the analysis, it was revealed that 36.7% of teachers never used online learning media during teaching and learning activities. About 73.3% of teachers knew the SAC Android learning media. However, 26.7% of teachers did not know the SAC Android learning media, 86.7% of teachers agreed that SAC Android learning media should be implemented, and 83.3% of teachers were willing to become one of the SAC Android learning media modelling schools. So that the "My Ecosystem" application from the development of SAC Android learning media was widely used as a learning medium that could help teachers in schools to perform online learning, especially in terms of 4C (Critical Thinking, Creativity, Collaboration, Communication).

Keywords: Smart Apps Creator Android, My Ecosystem Application, 4C

# **PENGARUH GAYA KEPIMPINAN INSTRUKSIONAL PENGETUA WANITA TERHADAP TAHAP MOTIVASI GURU DI SEKOLAH MENENGAH KEBANGSAAN**

Siti Aishah Bakhari @ Abd Halim, aishahbakhari828@gmail.com, Universiti Sains Malaysia  
Jamalsafri Saibon, jamalsafri@usm.my, Universiti Sains Malaysia

## **ABSTRAK**

Kajian ini bertujuan mengenalpasti hubungan gaya kepimpinan instruksional pengetua wanita dengan tahap motivasi guru. Kajian ini menggunakan kaedah tinjauan dengan soal selidik sebagai instrumen kajian. Seramai 248 orang guru di sekolah menengah kebangsaan daerah Seberang Perai Tengah dipilih sebagai sampel kajian dengan menggunakan kaedah pensampelan bertujuan. Data dianalisis menggunakan statistik deskriptif dan inferensi. Dapatan daripada kajian yang dibuat menunjukkan Dimensi Kepimpinan Instruksional Pengetua Wanita berada pada tahap tinggi dengan skor min = 4.1680. Dapatan kajian juga menunjukkan skor min bagi motivasi guru adalah 4.33. Analisis Korelasi Pearson menunjukkan dimensi kepimpinan instruksional pengetua wanita kedua mempunyai hubungan yang signifikan yang paling tinggi terhadap tahap motivasi guru iaitu ( $r = 0.755$ ,  $p = 0.05$ ). Manakala dapatan kajian seterusnya iaitu Ujian Regresi Linear Mudah pula menunjukkan kepimpinan instruksional pengetua wanita adalah peramal terbaik yang signifikan terhadap motivasi guru. Kesimpulannya, kajian ini menunjukkan pengaruh kepimpinan instruksional pengetua wanita terhadap motivasi guru adalah pada tahap tinggi. Implikasi kajian menunjukkan pendekatan kepimpinan yang bersesuaian dapat meningkatkan motivasi guru.

Kata kunci: Kepimpinan Instruksional, kepimpinan sekolah, motivasi guru

# IMPROVING STUDENTS' NARRATIVE WRITING SKILLS THROUGH TOONTASTIC ANIMATION-BASED DIGITAL STORYTELLING

N Nor Hanim Ayuni Binti Baharom, [nns.ayuni@gmail.com](mailto:nns.ayuni@gmail.com), SMK Dato' Ismail

## ABSTRACT

Narrative writing is one of the skills taught evenly with other language skills in the Common European Framework of Reference (CEFR). As of 2021, the Ministry of Education Malaysia revamped the writing assessment where students are required to write cohesively within 200-250 words. This puts emphasis on students' ability to manage ideas and present them during examination. However, lower proficiency students struggle to generate ideas to be put into narrative writing. The analysis of students' narrative writing works shows the lacking of creativity, poor development of ideas, apart from the occurrence of frequent grammar errors. This paper aims to explore how the integration of Animation-based Digital Storytelling activity using Toontastic application as a pedagogical material can improve students' skills in narrative writing. Through examination of existing literature, this study explores the numerous pedagogical values of integrating animation in enhancing students' ability in writing a narrative. This study was conducted by applying classroom action research which was done in 3 online classes. Each class was organised according to a theme: analysing a sample narrative, structuring narrative writing, and introduction of Toontastic digital storytelling application. The subject of this study were 45 Form 3 students of SMK Dato' Ismail whereby 22 students are from controlled group and 23 students are from experimental group. Qualitative and quantitative data was derived from students' narrative writing work and interviews were used to investigate the effectiveness of this method. The findings showed higher submission rate improvement in the quality of narrative writing among the students in experimental group in terms of ideas and organisation of the narrative. The interview also revealed that students' learning satisfaction and motivation are elevated. The pedagogical implications of this study suggest that English language teachers could benefit from the use of animated video in narrative writing lesson.

Key words: Narrative Writing Skill, Animation, Digital Story telling



# **KEBERKESANAN TRANSFORMASI SEKOLAH (TS25) DAN HUBUNGANNYA DENGAN AMALAN DI SEKOLAH SARAWAK**

Ling Song Kai, PhD; Khalid bin Bujang; Omar bin Hj Mahli  
Sektor Pengurusan Sekolah  
Jabatan Pendidikan Negeri Sarawak

## **ABSTRAK**

Program Transformasi Sekolah 2025 (TS25) merupakan inisiatif Kementerian Pendidikan Malaysia (KPM) untuk meningkatkan kemenjadian murid di sekolah melalui kepimpinan yang berwawasan, guru yang kompeten serta komitmen Komuniti luar. Namun, kajian lepas melaporkan peratusan komitmen Pemimpin dan guru beberapa buah sekolah di Malaysia masih pada tahap sederhana. Salah satu faktor penurunan komitmen Pemimpin dan guru berpunca daripada kepimpinan yang lemah dalam kalangan pentadbir terhadap organisasi kepimpinannya. Sehubungan dengan itu, artikel ini bertujuan untuk mencari dapatan kajian amalan TS25 dan hubungannya dengan amalan di beberapa buah sekolah di Sarawak yang terlibat dengan Program Transformasi Sekolah 2025 (TS25). Teknik persampelan rawak telah digunakan bagi memastikan kebarangkalian semua responden terpilih sebagai sampel kajian tanpa bias. Soal selidik diedarkan di lima buah sekolah yang mempunyai populasi guru seramai 22 orang. Skor min telah digunakan untuk mengenalpasti keberkesanan di antara amalan TS25 dan tahap pelaksanaan TS25. Analisis menggunakan SPSS 22.0 menunjukkan item kepimpinan adalah pada tahap sederhana (min = 1.71). Manakala item PdPc pada tahap tinggi (min = 1.8). Justeru dapatan kajian awal ini wajar diperluaskan ke sekolah rendah dan menengah Program Transformasi Sekolah 2025 (TS25) di seluruh Sarawak bagi menguji keberkesanan Kepimpinan dalam kalangan pentadbir sekolah untuk meningkatkan Program TS25 di Sarawak.

Kata Kunci: Kepimpinan; Pentadbir sekolah; Amalan TS25

# **THE EFFECT OF GAMIFICATION ON TEACHING ENGLISH AS A FOREIGN LANGUAGE IN HIGHER EDUCATION: A META-ANALYSIS**

Samah Ali Mohsen Mofreh, samahmofreh@usm.my, Universiti Sains Malaysia  
Guo Jingjing, guojingjing@student.usm.my, Universiti Sains Malaysia

## **ABSTRACT**

The concept of gamification, as the use of game design elements in non-game contexts, has attracted educators who take it as an innovative teaching approach. Researches on the application of gamification in teaching English as a foreign language (TEFL) has been conducted from cognitive and affective perspectives. While the studies on the effectiveness of gamified TEFL approach are mainly in the K-12 stage, the picture of gamification in TEFL during the higher education stage is unclear. Thus, this study intends to make a meta-analysis of the empirical studies on the effects of gamification on the TEFL in higher education to systematically synthesize the research findings on its effects. For the systematic review, 20 research papers dating from 2017 to 2021 were selected from the two databases ERIC and Scopus and examined for their findings on the cognitive and affective domains. Through the review of literature, it can be seen that there are limited empirical researches on the application of gamification in TEFL in higher education; gamification can be a useful tool for college TEFL; it helps to increase learners' engagement and motivation.

Keywords: Gamification, teaching English as a foreign language, higher education, meta-analysis

# **IDENTIFIKASI PENYAKIT PASCA PANEN BUAH TOMAT (LYCOPERSICUM ESCULENTUM MILL.) POST HARVEST DISEASE IDENTIFICATION OF TOMATO (LYCOPERSICUM ESCULENTUM MILL.) FRUIT**

Marsilah silahsila20@gmail.com the University of Mulawarman  
Nikmatul Janah Akhsan nimatuljannah@faperta.unmul.ac.id the University of Mulawarman  
Suyadi suyadi@faperta.unmul.ac.id the University of Mulawarman

## **ABSTRACT**

Faculty of Agriculture Mulawarman University. Post Harvest Disease Identification of Tomato (*Lycopersicum esculentum* Mill.) Fruit. Supervised by Ni'matujannah Akhsan, and Suyadi. A descriptive research was conducted to determine the pathogen of post harvest disease of tomato fruits at public market of Samarinda. Research activities carried out about a month, including tomato fruit sampling from public market (Pasar Segiri) and identification of pathogen at Laboratory of Pest and Plant Disease, Faculty of Agriculture, Mulawarman University. Result showed that the causal organism of post harvest disease on tomato fruit based on the Laboratory identification were fungi (*Fusarium oxysporum* f.sp. *lycopersici*) and bacteri (*Pseudomonas solanacearum*).

Key words: Tomato, identification, post harvest, diseases

# TEORI AKAL MENURUT IMAM AL-GHAZALI DAN IMPLIKASINYA TERHADAP PEMBELAJARAN SEJARAH PERUNDANGAN ISLAM

Zeti Yusmira binti Hj Jaludin<sup>1</sup>, Prof Madya Dr. Muhamad Zahiri bin Awang Mat<sup>2</sup> & Dr. Abdul Rauf bin Muhammad Amin<sup>3</sup>

Kolej Universiti Perguruan Ugama Seri Begawan  
zeti.yusmira@gmail.com<sup>1</sup>, [zahirimat@gmail.com](mailto:zahirimat@gmail.com)<sup>2</sup>, [raufcai@gmail.com](mailto:raufcai@gmail.com)<sup>3</sup>

## ABSTRAK

Imam Al-Ghazali merupakan antara tokoh ilmuan Islam yang menjelaskan tentang hakikat akal dan pembahagiannya. Oleh itu, kertas kerja ini bertujuan untuk membincangkan teori akal menurut Al-Ghazali kepada tiga bahagian serta implikasinya terhadap aktiviti berfikir kalangan pelajar prauniversiti dalam pembelajaran Sejarah Perundangan Islam. Kajian ini menggunakan kaedah kuantitatif dengan analisis deskriptif (kekerapan dan peratusan) bagi keperluan membangun modul terhadap 191 subjek kajian dari empat prauniversiti yang mengikuti subjek Syari'ah dan kesan pencapaian ujian pra dan ujian pasca dari pelaksanaan pembelajaran dengan aplikasi Modul 3M menggunakan analisis statistik *Paired Samples Statistic* kepada 22 subjek kajian. Dapatan kajian menunjukkan berlakunya keperluan tinggi untuk membangun Modul 3M dengan 92.7% (177 subjek kajian). Kemudian, terdapat perbezaan pencapaian bahawa skor ujian pasca lebih tinggi berbanding skor ujian pra yang signifikan. Dapatan kajian ini merumuskan tiga bahagian hakikat akal teori Al-Ghazali diimplimentasikan dalam pelaksanaan Modul 3M (*Mind Mapping and Metacognitive*) menunjukkan berlakunya tiga proses aktiviti berfikir dengan tambahan kepada dua proses aktiviti berfikir dalam konteks pembelajaran Sejarah Perundangan Islam iaitu i) keperluan pelajar sebagai kesediaan menjalankan praktikal dan amalan berasaskan metakognitif dalam strategi belajar, ii) pertumbuhan ilmu kesan daripada tindakan belajar, iii) memilih fakta dari pengalaman belajar, iv) hasil belajar melalui proses penilaian dan v) keupayaan pelajar membuat kesimpulan melalui perolehan ilmu pengetahuan sepanjang kegiatan Modul 3M dilaksanakan. Perlaksanaan pembelajaran berasaskan teori akal Imam Al-Ghazali ini wajar diimplimentasikan memandangkan memberi kesan yang positif dalam kalangan pelajar.

Kata Kunci: Teori Al-Ghazali, Pendidikan Islam, Sejarah Perundangan Islam

# **PENGAJARAN BAHASA ARAB DI SEKOLAH-SEKOLAH UGAMA DI NEGARA BRUNEI DARUSSALAM : PELAKSANAAN & CABARAN**

Hjh Noorhaizadatul Akmar binti Hj Metamit  
Pg Dr Hjh Nur-Ashikin binti Pg Hj Petra  
Universiti Brunei Darussalam

## **ABSTRAK**

Kajian ini adalah untuk mengenal pasti tahap kesediaan guru-guru agama dan cara pelaksanaan pengajaran mata pelajaran Bahasa Arab di samping mengenal pasti permasalahan dan cabaran yang dihadapi oleh guru-guru agama seperti alat bantu mengajar, buku teks dan batasan waktu yang diperuntukkan. Responden di dalam kajian ini terdiri daripada 133 orang guru agama yang mengajar mata pelajaran Bahasa Arab di sekolah agama seluruh daerah di Negara Brunei Darussalam. Reka bentuk kajian ini ialah berbentuk tinjauan deskriptif dan instrumen kajian yang digunakan ialah soal selidik. Hasil dapatan kajian dianalisa dengan menggunakan perisian *Statistical Packages for Social Sciences (SPSS) v.20*. Hasil dapatan kajian menunjukkan terdapat beberapa isu yang timbul dalam melaksanakan pengajaran mata pelajaran Bahasa Arab di sekolah-sekolah agama.



# **PARALLEL SESSION (ROOM 3)**

# **SBATA IN MALAYSIAN PRIMARY SCHOOL CLASSROOM ASSESSMENT: THE MEDIATING ROLE OF TEACHER EMPOWERMENT**

Annaliza Mohd Isa, annaliza@student.usm.my, Universiti Sains Malaysia  
Al Amin Mydin, [alamin@usm.my](mailto:alamin@usm.my), Universiti Sains Malaysia  
Abdul Ghani Kanesan Abdullah, agk@usm.my, Universiti Sains Malaysia

## **ABSTRACT**

School-based management and teacher autonomy (SBATA) are the key elements in the transformation of the Malaysian curriculum, especially in the aspect of assessment i.e classroom assessment. The objective of this study is to identify the influence of school-based management on teacher autonomy in classroom assessment with the mediation of teacher empowerment. This study adopts a quantitative approach and uses surveys as a method of data collection. Online questionnaires were distributed to teachers through headmasters. A total of 565 primary school teachers in Sabah were selected through stratified random sampling. The data then analyzed descriptively and inferentially using SPSS version 25. Results show that SBATA is at a high level and there is a significant influence of school-based management on teacher autonomy in classroom assessment. Overall, teacher empowerment had a full mediating effect in SBATA. Thus, school management needs to provide resources and opportunities through empowerment in increasing the level of professionalism and accountability of teachers which will then strengthen their autonomy.

**Keywords:** Teacher autonomy, School-based Management, SBM, Autonomy, Empowerment, Teacher empowerment

# OBSTACLES ENCOUNTERED BY TEACHERS THROUGHOUT VIRTUAL LEARNING

Nina Amira Binti Mohd Sabir. [ninamieyra@gmail.com](mailto:ninamieyra@gmail.com)

## ABSTRACT

COVID-19 has impacted negatively on the vast of the world's industries. Hence, the education turns automatically to virtual learning, which affects the students' academic as many young learners are still not used to virtual learning. It is hard to engage with the students at home, and some do not mind or even care about online classes as it is a struggle to focus during online learning. Not just students but teachers also face a lot of effort in teaching online courses. The pandemic changes the whole situation as online learning is a new norm worldwide. Indeed, there are some obstacles that the teacher faces, like difficulty engaging with students, communication problems, technical issues, and connectivity problems during teaching and learning sessions. Traditional face-to-face learning changes to e-modern learning as it becomes the current situation during this pandemic. It uses technology and an exciting learning platform that not all senior teachers master, affecting teaching performances due to the dull use of teaching platform choices. However, each difficulty has its particular set of solutions. Every obstacle that the teachers went through has its solutions as it requires creativity, commitment, good communication, and early preparation. This finding provides a few answers to a common problem that every teacher has faced throughout virtual learning based on self-experience and reflection throughout the teaching and learning sessions.



# HYBRID LEARNING: A NEW PARADIGM OF TEACHERS' PROFESSIONAL LEARNING

Wan Fadhlurrahman bin W. Md Rasidi, [fadhlurrahman@student.usm.my](mailto:fadhlurrahman@student.usm.my), Universiti Sains Malaysia  
Al-Amin bin Mydin, [alamin@usm.my](mailto:alamin@usm.my), Universiti Sains Malaysia

## ABSTRACT

Teacher professional learning delivery methods are made physically through face-to-face meetings and training. However, professional learning is also held online (e-learning) commensurate with the latest technological developments. These face-to-face approaches and online training have helped enhance teacher professionalism through various training initiatives. However, both of these teacher learning mediums have their respective advantages and disadvantages. Nowadays, an alternative approach that is more flexible and getting further attention is known as hybrid learning. The hybrid learning approach is a combination of both face-to-face learning and e-learning elements. The hybrid learning can be utilized with various approaches depends on suitability. Hence, this study has been carried out to explore the implementation of hybrid learning in the context of educational management. The results of the literature review suggest that hybrid learning can be implemented by taking into account the factors of time, space, and user readiness.

Keywords: Hybrid learning, teacher professional learning, online learning, face-to-face learning

# CHALLENGES TO CLASSROOM INSTRUCTION IN TEACHERS' IMPLEMENTATION OF FORMATIVE ASSESSMENT AND FEEDBACK PRACTICES

Anne Malar Selvaraj, [P94586@siswa.ukm.edu.my](mailto:P94586@siswa.ukm.edu.my), Universiti Kebangsaan Malaysia

## ABSTRACT

Formative assessment practices are an ongoing integrated process that enables teachers to tailor their instructions to students' needs and helps them to decide what learning changes they are to develop. Formative assessment thus extends and promotes learning as a continuous phase and is incorporated into learning to collect data regarding the progress made by the students against learning objectives. Often challenges in the classroom hinder the process of teaching and learning because developing formative assessment tasks, providing positive feedback, and conducting formative assessment needs adequate planning in order to have a successful lesson. The case study aims to provide insights into what challenges teachers face; (1) developing formative assessment tasks; (2) providing positive feedback; and (3) conducting formative assessment practices with secondary students during learning and teaching. This qualitative case study draws on data generated through semi-structured in-depth interviews and vignettes responses. Ten National Master Trainers/secondary teachers in Formative Assessment were selected in this study. The findings in this study revealed that teachers find it challenging to use formative assessment practices as a classroom strategy as they found it time-consuming and disrupting learning due to the low proficiency among students. Students take time to complete tasks, and teachers are looking at large class sizes of students between forty-five to fifty students in each class. The present study used an established model of formative assessment (Sadler, 1989) as a framework to answer the research question: what challenges exist to classroom instruction in teacher's implementation of feedback practices? The model delineates feedback into three important principals: possess a concept of the standard (goal or reference level) being aimed for; compare the actual (or current) level of performance with the standard; and engage in appropriate action which leads to some closure of the gap.

Keywords: formative assessment; feedback practices; implementation, reference level; level of performance

# **PEMBINAAN KERANGKA KONSEPTUAL PENGARUH KESEDIAAN PERUBAHAN ORGANISASI TERHADAP ORGANISASI PEMBELAJARAN DI KOLEJ VOKASIONAL**

Ahzan Salvina Wati Ahmad, [ahzansalvina78@gmail.com](mailto:ahzansalvina78@gmail.com), Universiti Pendidikan Sultan Idris  
Jamal@Nordin Yunus, [jamal@fpe.upsi.edu.my](mailto:jamal@fpe.upsi.edu.my),

## **ABSTRAK**

Dalam strategi pelaksanaan yang dinyatakan dalam Dasar Pendidikan Kebangsaan (2017) menyatakan salah satu strategi yang terdapat didalamnya ialah memperkasakan kurikulum Pendidikan Teknik Vokasional (PTV) supaya pelajar lepasan Pendidikan Teknik dan Vokasional mempunyai laluan kerjaya yang jelas, luas, nilai kebolehpasaran, menguasai kemahiran keusahawanan dan kebolehkerjaan. Agenda pendidikan ini seharusnya di sokong oleh kesediaan perubahan oleh pensyarah Kolej Vokasional dan pembangunan organisasi sebagai Organisasi Pembelajaran yang diamalkan di Kolej Vokasional. Artikel ini ditulis berpandukan kepada Teori Kesediaan Perubahan Organisasi yang dicadangkan oleh Weiner (2009) dan juga Model Organisasi Pembelajaran oleh Peter Senge (2006) yang bertunjangkan kepada keperluan Kolej Vokasional untuk melakukan perubahan bagi menghadapi perubahan di peringkat global. Kesediaan Perubahan Organisasi dalam kalangan pensyarah Kolej Vokasional mempunyai (2) dimensi iaitu perubahan komitmen dan perubahan efikasi. Manakala bagi Model Organisasi Pembelajaran mempunyai (5) dimensi iaitu kecekapan sendiri, perkongsian wawasan, pembelajaran berpasukan, pemikiran bersistem dan mental model. Artikel ini mengupas pengaruh kesediaan perubahan organisasi terhadap organisasi pembelajaran dalam memastikan organisasi pembelajarannya mampu untuk beradaptasi dengan apa-apa jua perkembangan dalam industri. Kolej Vokasional lebih memfokuskan kepada kemenjadian pelajar-pelajar yang mahir dalam bidang teknikal iaitu menumpukan kepada hands-on skills. Perubahan dalam arus perkembangan teknologi telah menuntut perubahan demi perubahan segera dalam kalangan tenaga pengajar di persiapkan untuk Kolej Teknik dan Vokasional mencapai status sebagai organisasi pembelajaran bagi membentuk generasi muda yang mempunyai pelbagai kebolehan, mempunyai kemahiran dan pengetahuan teknikal. disiplin sekolah merupakan aspek yang penting dalam memastikan kehidupan murid lebih berkualiti tinggi.

Kata kunci: Kesediaan Perubahan Organisasi, Organisasi Pembelajaran. Kolej Vokasional

# INVESTIGATING THE LEVEL OF COGNITIVE READINESS OF PRIMARY TEACHERS IN IMPLEMENTING BLENDED LEARNING IN ESL CLASSROOM

Vicneswary Purshothaman, [pvicneswary@student.usm.my](mailto:pvicneswary@student.usm.my), Universiti Sains Malaysia

## ABSTRACT

This study aimed to investigate the teachers' level of cognitive readiness in terms of their technological knowledge, pedagogical skills, and metacognitive attribute in implementing blended learning in ESL classrooms. This study was also conducted to investigate the significant differences in the mean score of cognitive readiness between the different categories of teachers' age, teaching experiences, and education levels in blended learning implementation. The research design using a quantitative approach via a cross-sectional survey research method has been conducted. There were 202 primary ESL teachers from Kuala Kangsar District chosen as the study's samples through the simple random sampling technique. Data was collected through a questionnaire adapted from Graham et al. (2019), Balcinkali (2011) as well as Akaslan and Law (2010). The questionnaire consisted of three main sections, respectively: teachers' technological knowledge (11 items), pedagogical skills (34 items) and metacognitive attribute (21 items), which was administered through Google Form link. Data were analysed using the descriptive analysis (mean and standard deviation) and inferential analysis (a one-way ANOVA and an independent t test). Therefore, the findings indicated that the primary teachers' level of cognitive readiness in all the three constructs was 'cognitively ready but needed few improvements. Besides, the study's findings also showed significant differences in the mean score of cognitive readiness between the different categories of teachers' age, years of teaching experiences, and education level in implementing blended learning. Finally, suggestions were made at the implementation level so that that professional development courses for English teachers will be emphasised to ensure they understand the blended learning approach.

Keywords: blended learning, technological knowledge, pedagogical skills, metacognitive attribute, ESL classroom

# HUBUNGAN PENGURUSAN DISIPLIN SEKOLAH DAN KUALITI KEHIDUPAN MURID DI SEMENANJUNG UTARA MALAYSIA

Sire Etum, [drsireetum@student.usm.my](mailto:drsireetum@student.usm.my), Universiti Sains Malaysia  
Al-Amin Mydin, Universiti Sains Malaysia  
Abdul Ghani Kanesan Abdullah, Universiti Sains Malaysia

## ABSTRAK

Pengurusan disiplin sekolah merupakan aspek yang penting dalam memastikan kehidupan murid lebih berkualiti tinggi. Setiap sekolah mempunyai sistem peraturan masing-masing yang diwujudkan bagi membendung masalah disiplin para murid. Sungguhpun begitu, murid sering mempamerkan tingkah laku yang negatif walaupun peraturan sudah ditetapkan. Ini menunjukkan bahawa sistem pengurusan disiplin sekolah masih lagi tidak diberi penekanan dalam memastikan kehidupan murid lebih berkualiti. Justeru, kajian ini dijalankan bagi mengenal pasti hubungan pengurusan disiplin sekolah dan kualiti kehidupan murid sekolah menengah di Semenanjung Utara Malaysia. Seramai 539 orang murid tingkatan empat terlibat dalam kajian ini yang dipilih menggunakan pensampelan pelbagai peringkat. Instrumen pengurusan disiplin sekolah mengandungi 18 item yang diadaptasikan daripada Kalaichalvi (2012). Di samping itu, instrumen kualiti kehidupan murid mengandungi sepuluh item dan diolah daripada Stegar et al. (2006). Dapatan menunjukkan bahawa tahap pengurusan disiplin sekolah adalah tinggi ( $M=4.09$ ), manakala kualiti kehidupan murid turut berada pada tahap yang tinggi ( $M=3.94$ ). Keputusan kajian turut mendapati bahawa terhadap hubungan positif yang sederhana di antara kedua-dua pemboleh ubah dengan nilai korelasi,  $r = 0.45$ . Secara keseluruhannya, pengurusan disiplin sekolah mempunyai peranan yang besar dalam membentuk kualiti kehidupan seseorang murid. Mereka akan lebih patuh dan mempamerkan tingkah laku yang unggul sekiranya tahap pengurusan disiplin di sesuatu sekolah ditadbir dengan baik.

Kata kunci: pengurusan disiplin sekolah, kualiti kehidupan murid, tingkah laku murid

# IMPAK PENDIDIKAN SAINS & BUDAYA TERHADAP PEMBANGUNAN JEPUN: SATU KAJIAN LITERATUR

Nur Farhana Abdul Aziz, [nurabdulaziz2012@gmail.com](mailto:nurabdulaziz2012@gmail.com), Universiti Sains Malaysia  
Salmiza Saleh, [salmiza@usm.my](mailto:salmiza@usm.my), Universiti Sains Malaysia  
Nur Diyana Mohamad, [ittigani82@gmail.com](mailto:ittigani82@gmail.com), Universiti Sains Malaysia  
Zarifah Omar, [zarifahomar2014@gmail.com](mailto:zarifahomar2014@gmail.com), Universiti Sains Malaysia

## ABSTRAK

Jepun terkenal dengan kemajuan dalam pembangunan dan teknologi. Kajian ini bertujuan mengenalpasti budaya-budaya dan sistem pendidikan Sains yang mempengaruhi pembangunan Jepun. Kajian kepustakaan menggunakan maklumat yang diperolehi melalui Google Scholar, Scopus, laman web, jurnal, artikel dan laporan kerajaan menggunakan kata kunci seperti pendidikan Jepun, pendidikan Sains di Jepun, budaya Jepun, Pembangunan di Jepun, Sains dan teknologi di Jepun. Jepun mempunyai asas yang luas untuk penyelidikan sains dan teknologi dari segi jumlah dan jumlah kakitangan penyelidikan per kapita. Jepun, yang mempunyai sumber daya alam yang terhad, oleh itu pendidikan sains juga penting untuk melatih sumber manusia seperti saintis dan jurutera. Kehebatan teknologinya yang disokong oleh pencapaian sains bertindak sebagai enjin pembangunan ekonomi dan berfungsi sebagai sumber kekuatan nasionalnya Antara usaha kerajaan *MEXT* dalam pendidikan Sains seperti peruntukan belanjawan bagi *R&D* (penyelidikan dan pembangunan dalam bidang sains, pemeraksanaan institusi-institusi pendidikan dengan jaringan luar seperti pusat sains & muzium sains, dan penambahbaikan silibus sains di sekolah dan pusat pengajian tinggi. Manakala budaya adalah idea, adat istiadat, dan tingkah laku sosial orang atau masyarakat tertentu. Elemen budaya yang diamalkan oleh masyarakat Jepun seperti pemakanan sihat, kebersihan dan 5S, pendekatan tradisional "*Chi-Toku-Tai*", '*inemuri*', '*rajio taiso*', budaya kaizen', budaya pembinaan rumah yang mesra empat musim dan menepati waktu memberi impak dalam pembangunan Jepun dengan penciptaan berteknologi tinggi seperti keretapi bullet *Shinkansen*, *Giant Satellite*, sistem *e defense* untuk simulasi dan pencegahan bencana. Impak pendidikan dan budaya juga telah meletakkan Jepun di tempat ke 17 dalam agenda Sustainable Development Goals (SDG) daripada 166 buah negara dengan 79.2 mata. Jepun mendapat penilaian tinggi untuk SDG 4 (Pendidikan berkualiti), SDG 9 (Inovasi dan infrastruktur industri), dan SDG 16 (Keamanan, keadilan dan institusi yang kuat).

Kata kunci: Pendidikan Sains, budaya, teknologi, pembangunan

# **TINJAUAN LITERATUR: PENGGUNAAN PLICKERS DALAM AKTIVITI KBAT TERHADAP MINAT DAN PENGLIBATAN MURID TINGKATAN 4 MENULIS KARANGAN BERPANDU**

Dzulkifli Bin Mohd Aspah, [dzulkifli@student.usm.my](mailto:dzulkifli@student.usm.my), Universiti Sains Malaysia  
Fadzilah Amzah, [fadzilahamzah@usm.my](mailto:fadzilahamzah@usm.my), Universiti Sains Malaysia

## **ABSTRAK**

Tinjauan literatur dalam kajian ini, untuk melihat penggunaan Plickers dalam aktiviti KBAT terhadap minat dan penglibatan murid tingkatan 4 menulis karangan berpandu. Tujuan tinjauan literatur ini, adalah untuk menerangkan aplikasi teknologi yang sesuai digunakan sebagai alat pengajaran seperti Plickers. Data utama dalam tinjauan literatur ini, diperoleh melalui kajian-kajian lepas dan Jurnal. Kata kunci yang digunakan dalam proses pencarian artikel ialah aplikasi teknologi, pengajaran dan pembelajaran (PdP), media sosial, internet, Plickers dan KBAT melalui 5 artikel yang dibaca. Enjin pencarian yang digunakan dalam tinjauan literatur ini, ialah Google scholar, researchgate, Sage journal, dan Scopus. Dapatan melalui tinjauan ini, membantu guru untuk mengenal pasti platform aplikasi yang sesuai digunakan sama ada di dalam ataupun di luar bilik darjah dalam pengajaran penulisan karangan berpandu. Kesimpulannya, penggunaan Plickers sangat relevan dalam dunia pendidikan pada masa kini bagi membantu melahirkan murid yang berdaya saing serta berilmu pengetahuan aras tinggi bagi menyumbang kemajuan dalam sistem pendidikan negara.

# ACADEMIC RESILIENCE IN THE ERA OF DIGITAL DISRUPTION: A REVIEW

Nur Hidayah Hilmi, [nurhidayah.hilmi@gmail.com](mailto:nurhidayah.hilmi@gmail.com), Universiti Sains Malaysia Shahabuddin Hashim, [shah@usm.my](mailto:shah@usm.my), Universiti Sains Malaysia

## ABSTRACT

In the aftermath of the COVID-19 epidemic, the education technology industry is one of the fastest expanding. As schools and other educational institutions abruptly closed, all attention moved to digital education alternatives, coining the term "digital disruption." Although it may appear confusing at first, this word refers to a broad range of technical advancements that have been transforming the world. The effects and outcomes of these educational "digitalizations," on the other hand, have been mixed. Despite risk factors that prohibit the majority of students with similar backgrounds from thriving academically, some students can succeed. It's unknown how Malaysian adolescent acquire academic resilience in the face of digital disruption. The purpose of this review is to look at the construction of an academic resilience model that looks at how students develop their studies through digital technologies and surroundings, as well as their perceptions of their resilience. This study found that most of the students expressed their acceptance in the use of technology in classroom and were described with personal characteristics that determine the resilient individuals, which allows to infer that the teaching - learning strategy used favors the development of academic resilience, as it was outlined in the proposed model and agrees supports that resilience can be learned through interactions with technological environments. This study contributed to the effect of digitalization to academic resilience. Further research may advise for assisting students in increasing their resilience by utilizing digitalization.

Keywords: academic resilience, digital disruption, digitalization



# MADRASAH EDUCATION BETWEEN INDIA AND PHILIPPINES

Nur Farhana Abdul Aziz, [nurabdulaziz2012@gmail.com](mailto:nurabdulaziz2012@gmail.com), Universiti Sains Malaysia  
Zarina Mustafa, [mzarina@usm.my](mailto:mzarina@usm.my), Universiti Sains Malaysia

## ABSTRACT

Madrasa is a traditional religious educational institution of Muslims. It is place where Dars (lesson) is given to the students. The history of Madrasa education began in Masjid al Nabawi (Prophet's Masjid) at a platform called al-Suffa which was reserved for the learning people. The term "madrasah" has various meanings. Madrasah typically functions as a privately owned school where a religious teacher instils pupils with the basic tenets of Islam and Arabic language. In Philippines, the madrasah or Islamic education is believed to coincide with the coming of Islam by the Arab missionaries and Malay adventurers who settled in Sulu and western Mindanao. The evolution in Madrasah education further in the 1950's, when the Moro were sent to study to the Muslim countries. When these scholars returned to the Philippines, they established madrasah institutions offering the same Islamic curriculum that they learned abroad. Three types of madrasah in the Philippines are traditional or weekend madrasah; developmental or formal madrasah; and standard private madrasah. In India, the Muslim community constitutes the largest minority group and the third largest Muslim population of the world after Indonesian and Pakistani Muslims. The government sources estimate that there are approximately 1, 05,000 Madrasah institutions in India. The madrasahs lie in its potential to make education available to the poorer section of the society. Madrasahs provided free education and free books while the Government of India yet could not manage to provide children with free and compulsory education even after the landmark legislation of RTE -2009. The famous institutions are Darul 'Uloom Deoband, Darul 'Uloom Nadwatul' Ulama', Mazahir Uloom Saharanpur and Ashrafia Mubarakpur. This paper discussed in depth comparisons of madrasah system between India and Philippines in term of syllabus, funding, teacher trainings and monitoring. In conclusion, the Muslim society with lack of monetary funding successfully empower their religious study with the establishment of madrasah education is big achievement and contribution throughout the world.

Keywords: Madrasah education, religious study, Islamic education

## DEPRESSION AMONG COLLEGE STUDENTS IN CHINA

Huang Dandan, [dandanh@student.usm.my](mailto:dandanh@student.usm.my), Universiti Sains Malaysia Shahabuddin bin Hashim, [shah@usm.my](mailto:shah@usm.my), Universiti Sains Malaysia

### ABSTRACT

Depression is one of the most common mental health disorders in the college population. Relevant research indicated that approximately more than 20 percent of Chinese college students suffered from depression during the two years follow-up period and this ratio has kept growing over the past ten years (Song et al., 2020; Wanget al., 2020). In China, the mainstay of treatment for young people with depression is pharmacotherapy and psychotherapies. However, pharmacotherapy entails possible range of side effects, and psychotherapies can be inaccessible and expensive for most low-income or middle-income areas. Also, approximately a third of people with depression remain non-responsive to both treatments. Therefore, new cost-effective treatments or augmentation strategies for depression are urgently needed. Schuch found that physical inactivity or sedentary behavior are potentially modifiable risk factors for the onset of depression (2020), and physical activity is reported as having an antidepressant effect. Results indicated that aerobic exercise and resistance exercise are more widely used types of exercise intervention in depression. The main mechanisms of exercise for regulating depression include regulating cytokine production, increasing neurotransmitter release, inhibiting inflammation-related signal pathways, maintaining the mitochondrial function, reducing hippocampal apoptosis, and mediating microRNA expression. Exercise therapy will be a very important and effective means for the treatment of depression in the future. But, there is still a lot of work to be done to make exercise therapy widely recommended in clinic. For example, it deeply verifies the efficacy of resistance exercise or aerobic exercise and explores optimal protocols of individual or group exercise therapy for depression in the college population. This presentation aims to explore the status of depression and efficacious exercise intervention options to increase physical activity level and decrease sedentary behavior for Chinese college students. Suggestions for future research are also discussed.

Keywords: depression; college students; mental health intervention.

# STRATEGIES FOR IMPROVING CAREER ADAPTABILITY OF COLLEGE GRADUATES IN CHINA

Song Chunze, [lovesongchunze@student.usm.my](mailto:lovesongchunze@student.usm.my), Universiti Sains Malaysia  
Shahabuddin bin Hashim, [shah@usm.my](mailto:shah@usm.my), Universiti Sains Malaysia

## ABSTRACT

Huge pressures are now being faced by college graduates in China due to the gigantic number of annual graduates and severe situation in job market there. It is generally considered as one of the key factors that career adaptability may affect the stability and successful rate of graduate students in their future career life. In China, the frequently observed job-hopping may be caused by some issues in career adaptability when graduates just step into the workplace. In the past decade in China, many researchers have already provided a few suggestions on how to improve the career adaptability of undergraduates and graduates from different aspects, including students themselves, families, colleges, employers (Chai,2012; Huang,2019). Those suggestions have had covered a wide range with rich content, but most of them were only theoretically strategies without feasibility or operational instructions, which therefore were lack of compatibility and cannot have ideal results when applied to colleges. In order to effectively guide and enhance the career adaptability of college graduates in the future, the teaching contents, based on the colleges as platform and the requirements of students and employers, should be prepared systematically with focalization, compatibility and to refine the career adaptability, enrich teaching and practical ways in career planning education process, in which continuously follow up services should also be included. Finally, the purpose of this presentation is to increase the working stability by enhancing students' career adaptability via effective operation methods developed by our further validation studies.

Keywords: career adaptability, college graduates, improvement strategy

# ANALYSING PSYCHOLOGICAL CHARACTERISTICS FROM CHILDREN'S ART WORKS

Li Xiaoran, [lixiaoran520@student.usm.my](mailto:lixiaoran520@student.usm.my), Universiti Sains Malaysia  
Shahabuddin bin Hashim, [shah@usm.my](mailto:shah@usm.my), Universiti Sains Malaysia

## ABSTRACT

Children's art works are a display window of children's inner world. Teachers' analysis of children's art works is of great significance to understanding and promoting children's aesthetic psychology. At present, it is of great significance to guide the development of mental health through the analysis of children's art works, but the research results are not deep enough, and further research is needed. Teachers use children's art works to analyze, specifically from the evaluation methods of color analysis, composition analysis and content analysis to explore the characteristics of children's psychological development. Through color analysis, such as picture color contrast, coldness, warmth, strength, etc., analyze children's psychological characteristics, and through composition analysis such as picture size, analyze the psychological characteristics of children by the position of the picture and the relationship between the front and rear, and analyze the psychological characteristics of the children through content analysis such as the theme of the picture, expressing emotions, and depicting objects. The author hopes to analyze children's psychological characteristics and personality characteristics according to children's art works, so as to promote the next teaching and establish a set of generally applicable methods to analyze children's art works and evaluate their psychological characteristics.

Keywords: psychological characteristics, children, art works

# **THE ROLE OF PROFESSIONAL DEVELOPMENT AND TECHNICAL SUPPORT ON THE UAE SECONDARY SCHOOLS' TEACHERS ACTUAL USE OF ONLINE TEACHING AND ONLINE TEACHING SATISFACTION**

Ibrahim M. Bani Bakkar and Yahya M. Al-dheleai, School of Educational Studies, Universiti Sains Malaysia

## **ABSTRACT**

During the COVID-19 lockdown, schools and other educational institutions had to shift from face-to-face education to distance education. It requires careful planning, best platforms activation, encouraging teachers and students to deal with technologies. Therefore, professional development and technical support are needed for the education institution to ensure the quality of online teaching and students learning outcomes. This research is designed to measure the factors that affecting the actual online teaching and online teaching satisfaction from the perspective of secondary schools' teachers. More focus in this study is on the role of the provided professional development (training) programs and technical support of teachers online teaching perceived ease of use and the perceived usefulness. Moreover, the direct and the indirect impact of the provided professional development and the technical support on secondary schools' teachers actual use of online teaching and teaching satisfaction will analyze. This research will implement the quantitative research design in the data collection and the data analysis. Therefore, the data will be collected from 260 secondary schools' teachers in United Arab Emirates UAE using online survey questionnaire. The descriptive data will be analyzed using SPSS software while the model structure and analysis will be conduction using SmartPLS software. The findings of this study will add a new contribution to the existence knowledge in online education. The findings of this study are hoped to provide the UAE education authorities with up to date and reliable findings and research-based recommendations on the importance of the teachers professional development and the technical support to improve the quality of online teaching and learning.

# INVESTIGATING THE ATTITUDES AND PRACTICES OF ELT IN UTASA TOWARDS CPD DURING EMERGENCY ONLINE TEACHING

Aamir AL-Abri, [aamiralabri@student.usm.my](mailto:aamiralabri@student.usm.my), Universiti Sains Malaysia.  
Al Amin Mydin, [alamin@usm.my](mailto:alamin@usm.my), Universiti Sains Malaysia

## ABSTRACT

According to Oman Academic Accreditation Authority- OAAA (2016), Continuing Professional Development (CPD) ought to be high on the agenda for all Omani HEIs. This small-scale research aims to study the role of UTASA administration in providing and facilitating CPD from the English language teachers' points of view and to explore their attitudes and current practices during this online emergency teaching through Covid-19. Responses from 50 ELT teachers show that the UTASA administration relatively provides the needed support for teachers to execute online teaching. The findings concluded that no remarkable consistency in the surveyed teachers' thoughts and reflections regarding their attitudes although they have been surveyed with demographic variables (qualifications and years of experience). While some opt for more CPD opportunities, others believe that significant administrative challenges- including time and workload- can be a hindrance.

Keywords: ELT, CPD, HEIs, Leadership

# THE APPLICATION OF TRANSFORMATIONAL LEADERSHIP AT THE HIGHER EDUCATIONAL INSTITUTIONS

Ala'aldin Mansour Naser Alzu'bi, [alaa\\_alzoubi@yahoo.com](mailto:alaa_alzoubi@yahoo.com), Universiti Sains Malaysia  
Dr. Al-Amin Mydin, [alamin@usm.my](mailto:alamin@usm.my), Universiti Sains Malaysia

## ABSTRACT

The interests of the organization and its members need to be aligned. Such is a task for the transformational leader. In contrast to the transactional leader who practices contingent reinforcement of followers, the transformational leader inspires, intellectually stimulates, and is individually considerate of them. Transformational leadership may be directive or participative. Requiring higher moral development, transformational leadership is recognized universally as a concept. The extensive review of the recent literature showed the importance of transformational leadership in the education sector, especially, in the higher education, since the quality of the lecturers is widely acknowledged as the most important factor in ensuring the success of a learning process. The main reason of that is the proven direct impact on a student's academic and nonacademic achievements, which could be in turn controlled and further improved by the transactional leadership. The research included the main diminutions of the transactional leadership, which includes: First, the charisma, the second diminution is Inspirational communication which is defined as charismatic leaders use inspirational appeals and emotional talks to arouse follower motivations to transcend self-interest for the good of the team. The third diminution of the transformational leadership is the supportive leadership which refers to the developmental orientation towards staff and displays individualized attention to followers and responds appropriately to their personal needs. The fourth diminution is the intellectual stimulation which enhances employees' interest in and awareness of problems, and it helps to increase creative problem-solving skills, encouraging them to think about problems in new ways. The last reviewed diminution of the transformational leadership is the personal recognition, an example of that is the praise for work well done, recommendations for pay increases and promotions, and commendations for excellent effort. As a conclusion of the reviewed literature concerning the transformational leadership in the higher education sector, it was confirmed that the leaders with the transformational style are more capable to control and motivate the lecturers among different colleges and majors which therefore impact the organization positively as well as the students.

# **MULTI-DIMENSIONAL ROLE OF TRANSFORMATIONAL LEADERSHIP ON THE STAFF MOTIVATION OF HIGHER EDUCATION INSTITUTIONS IN OMAN**

Anwar Nasser Abdulla Al Ishaqi, [anwar.alishaqi@student.usm.my](mailto:anwar.alishaqi@student.usm.my), Universiti Sains Malaysia  
Dr. Al-Amin Bin Mydin, [alamin@usm.my](mailto:alamin@usm.my), Universiti Sains Malaysia  
Abdul Ghani Kanesan bin Abdullah, [agk@usm.my](mailto:agk@usm.my), Universiti Sains Malaysia

## **ABSTRACT**

The current research aims to assess the multi-dimensional role of transformational leadership on the staff motivation in the higher education institutions in Oman. Four dimensions of transformational leadership such as individualized characteristics, Intellectual Stimulation, idealized influencing and inspiring motivations were conceptualised. Data was collected from 391 participants from the higher education institutions in Muscat. Using Smart PLS 3.3.2, data was analysed by employing structural equational modelling. The findings revealed that all four dimensions of transformational leadership, individualized characteristics, Intellectual Stimulation, idealized influencing and inspiring motivations have significant impact on the staff motivation. The study contributed to the body of knowledge by examining multidimensional role of transformational leadership on staff motivation. To the best of our knowledge, no such study has been conducted and the current study is one of its ownkind.

**Keywords:** Staff Motivation, Transformational Leadership; Individualized Characteristics, Intellectual Stimulation, Idealized Influencing, Inspiring Motivation



# **PENGARUH KESEDIAN GURU TERHADAP NIAT DAN HUBUNGANNYA DENGAN AMALAN PENTAKSIRAN GURU-GURU SEJARAH SEKOLAH MENENGAH**

Thamothiran Kaveri, [ghananyughen@gmail.com](mailto:ghananyughen@gmail.com), Universiti Sains Malaysia  
Ahmad Zamri Khairani, [ahmadzamri@usm.my](mailto:ahmadzamri@usm.my), [Universiti Sains Malaysia](http://UniversitiSainsMalaysia.com)

## **ABSTRAK**

Amalan pentaksiran merupakan aspek penting yang perlu dikaji kerana guru merupakan pengurus pembelajaran yang bertanggungjawab melaksanakan pentaksiran. Amalan pentaksiran guru merupakan kriteria penting ke arah memperkaya pengalaman pembelajaran dan seterusnya mencapai pendidikan berkualiti. Justeru, kajian ini dijalankan bagi mengkaji pengaruh kesediaan guru terhadap niat dan hubungannya dengan amalan pentaksiran guru-guru Sejarah sekolah menengah. Teori Tingkah Laku Terancang digunakan untuk menerangkan hubungan di antara variabel-variabel yang digunakan dalam kajian ini iaitu kesediaan guru dan amalan pentaksiran guru-guru Sejarah sekolah menengah. Kajian ini menggunakan rekabentuk korelasi dan seramai 326 orang guru terlibat dalam kajian ini yang dipilih menggunakan pensampelan bertujuan. Data dianalisis menggunakan perisian SmartPLS 3.2.9. Dapatan menunjukkan bahawa kesediaan guru mempunyai hubungan yang signifikan terhadap niat dalam mempengaruhi amalan pentaksiran guru ( $b=0.10$ ,  $t=2.56$ ,  $p<0.01$ ). Implikasi dapatan kajian terhadap peningkatan amalan pentaksiran turut dibincangkan.

Kata kunci: Pengurusan kerja rumah, analisis faktor konfirmatori, kesahan menumpu, kesahan diskriminan.

# KOMPETENSI PENSYARAH IPG KAMPUS DALAM PELAKSANAAN KAPASITI PEDAGOGI PEMBELAJARAN BERMAKNA (KPPB) MELANGKAUI EKOSISTEM PEMBELAJARAN DINAMIK

Razila Aw Kamaluddin, PhD, razila@epembelajaran.edu.my, Institut Pendidikan Guru Malaysia  
Kartini Abdul Mutalib, PhD, kartini@ipsah.edu.my, Institut Pendidikan Guru Kampus Sultan  
Abdul Halim  
Jurina Ibrahim, jurina05-56@epembelajaran.edu.my, Institut Pendidikan Guru Kampus Tuanku  
Bainun  
Abdul Hadi Mat Dawi, PhD, abdhadi@pendidikguru.edu.my, Institut Pendidikan Guru  
Kampus Ipoh  
Zulkufli Mahayudin, zulkufli.mahayudin@pendidikguru.edu.my, Institut Pendidikan Guru  
Kampus Ipoh

## ABSTRAK

Kejayaan sesuatu agenda transformasi pendidikan bergantung kepada sokongan semua pihak daripada semua peringkat organisasi yang menyumbang dan komited terhadap perubahan. Oleh itu kejayaan pensyarah melangkaui ekosistem pembelajaran dinamik dalam pengajaran dan pembelajaran (PdP) di kampus dari segi ilmu, kemahiran dan kompetensi, bergantung kepada pelaksanaan pembelajaran bermakna yang selaras dengan Model Kerangka Kapasiti Pedagogi Pembelajaran Bermakna (KPPB). KPPB melangkaui Ekosistem Pembelajaran Dinamik merangkumi ciri-ciri 5B iaitu *Beyond the Bell, Beyond the Grade Level & Subject, Beyond the Walls, Beyond the Tools, dan Beyond the Due Date*. Kajian ini bertujuan untuk mengenal pasti tahap kompetensi pensyarah-pensyarah IPG dalam melaksanakan pembelajaran bermakna dan pemanfaatan digital dalam PdP. Kajian ini menggunakan kaedah tinjauan manakala proses pengumpulan data dilaksanakan melalui instrumen soal selidik KPPB Pensyarah yang ditadbirkan kepada sampel kajian secara dalam talian. Seramai 3000 orang pensyarah yang telah menerima latihan Kapasiti Pedagogi Pembelajaran Bermakna (KPPB) daripada 27 buah IPG kampus telah menjawab soal selidik ini. Instrumen soal selidik pengetahuan KPPB terdiri daripada tiga dimensi iaitu 40 item dimensi kapasiti pedagogi pembelajaran bermakna, 8 item dimensi pemanfaatan digital dan 6 item dimensi kompetensi global. Dapatan analisis menunjukkan bahawa 53.0% pensyarah telah mencapai kompetensi tahap tinggi, 24.0% berada di tahap kompetensi sederhana dan 22.3% di tahap kompetensi rendah terhadap pelaksanaan KPPB dalam PdP. Dapatan kajian ini memerihalkan kepentingan menguasai kompetensi dalam pedagogi terkini bagi menyemarakkan pendidikan dalam konteks Institut Pendidikan Guru (IPG) sebagai peneraju pusat kecemerlangan KPPB melangkaui Ekosistem Pembelajaran Dinamik dan latihan keguruan yang bertaraf dunia. Ringkasnya dapatan ini juga mencerminkan peranan yang dimainkan oleh IPG KPM ke arah melahirkan guru yang kompeten berada di atas landasan yang betul.

Kata kunci: Kompetensi Pensyarah, Ekosistem Pembelajaran Dinamik, Kapasiti Pedagogi Pembelajaran Bermakna (KPPB).

# **KESAHAN DAN KEBOLEHPERCAYAAN INSTRUMEN UJIAN SUPERITEM PENGUKURAN BERDASARKAN MODEL RASCH: KAJIAN RINTIS**

Mohd Faizul Ridzuan, mohdfaizul\_ridzuan@yahoo.com.my, Universiti Sains Malaysia Lim Lim Hooi Lian, hllim@usm.my, Universiti Sains Malaysia

## **ABSTRAK**

Kajian rintis ini adalah bertujuan untuk menguji item-item yang terdapat dalam Ujian Superitem Pengukuran sama ada memenuhi andaian-andaian utama dalam Model Rasch atau pun tidak. Instrumen Ujian Superitem Pengukuran merupakan ujian yang dibina berdasarkan proses kemahiran penaakulan yang disesuaikan dengan Model SOLO (Structure of the Observed Learning Outcome) dan Model Skematik Fong. Ujian Superitem Pengukuran ini adalah terdiri daripada situasi masalah yang melibatkan domain luas dan isipadu di mana setiap masalah mengandungi lima tahap kesukaran yang berbeza iaitu unistruktural, multistruktural, relasional rendah, relasional tinggi dan abstrak lanjutan serta tiga jenis pengganggu bagi setiap tahap yang merujuk kepada skema yang lengkap dengan kesilapan (E1), skema yang tidak lengkap dengan kesilapan (E3) dan menggunakan prosedur yang tidak relevan (E4). Setiap respons betul yang diberikan oleh pelajar menunjukkan tahap kemahiran penaakulan pelajar terbabit berdasarkan tahap yang terdapat dalam Model SOLO dan respons salah yang diberikan oleh pelajar pula menunjukkan jenis-jenis kesilapan yang dilakukan oleh pelajar terbabit berdasarkan Model Skematik Fong. Kajian rintis ini telah dijalankan di tiga buah Kolej Komuniti di negeri Perak yang melibatkan seramai 87 orang responden. Hasil dapatan kajian rintis ini menunjukkan kebolehpercayaan individu adalah tinggi iaitu 0.86 dengan indeks pengasingan 2.51. Manakala kebolehpercayaan item juga adalah tinggi iaitu 0.95 dengan indeks pengasingan 4.23. Selain itu, Ujian Superitem Pengukuran telah memenuhi aspek kesahan konstruk dalam Model Rasch iaitu dari segi keserasian item, polariti item dan unidimensionaliti. Kesimpulannya, instrumen Ujian Superitem Pengukuran ini adalah sah dan berupaya untuk mengenal pasti peringkat kemahiran penaakulan dan jenis-jenis kesilapan bagi topik pengukuran dalam kalangan pelajar Kolej Komuniti.

Kata kunci: Ujian Superitem Pengukuran, kesahan, kebolehpercayaan

# DEVELOPMENT OF COGNITIVE DIAGNOSTIC ASSESSMENT TO MEASURE THE MASTERY OF ALGEBRAIC SKILL AMONG FORM TWO STUDENTS

Mohd Azizi bin Mohd Noor, [mohdazizibinmohdnoor@student.usm.my](mailto:mohdazizibinmohdnoor@student.usm.my), Universiti Sains Malaysia  
Lim Hooi Lian, [hllim@usm.my](mailto:hllim@usm.my), Universiti Sains Malaysia

## ABSTRACT

This paper describes the process of developing and validating a cognitive diagnostic assessment (CDA) with multiple-choice (MC) items for accessing students' mastery of attributes related to 'Factorisation of Algebraic Fractions,' as well as the empirical evidence regarding item quality, cognitive model validity, and CDA with MC item reliability. The study's sample included 1000 Form Two students from Penang and Kedah states in Malaysia. To validate the instrument's validity, the data will be analysed using two measurement models which is Classical Test Theory (CTT) and attribute hierarchical method (AHM). Furthermore, in AHM, the psychometric analysis is utilised to evaluate the students' mastery level in each attribute and item using attribute probability. Hence, the Assessment Triangle and the Evidence Centered Design (ECD) are utilised to improve the theoretical framework and provide direction for the development of CDA with MC items. In order to develop the CDA with MC items, the domains of ECD such as domain analysis, domain modelling, and Conceptual Assessment Framework (CAF) will be mapped into the three vertices of the Assessment Triangle, which are cognition, observation, and interpretation. CDA process development is divided into two stages. The expert-based cognitive model and the students' response cognitive model. Generally, the first step will include the development of attribute hierarchy and items, while the second stage will focus more on assessment implementation in schools and psychometric statistical analysis. The ultimate point, all the techniques utilised in CDA development with MC items may be employed in mathematics classrooms to assist teachers in diagnosing students' cognitive processes for 'Factorisation of Algebraic Fractions.'

Keywords: Cognitive Diagnostic Assessment, factorisation of algebraic fractions, form two students, multiple choice items.

# **PENGARUH SUMBER TEKANAN DAN FAKTOR PERSONALITI TERHADAP KESEJAHTERAAN PSIKOLOGI: KAJIAN DALAM KALANGAN PELAJAR SARJANA EKSEKUTIF UKM**

Irwan Sukma Bin Sukarman, [irwan@picoms.edu.my](mailto:irwan@picoms.edu.my), Universiti Selangor (Unisel)

## **ABSTRAK**

Kajian ini bertujuan untuk mengkaji pengaruh sumber tekanan dan faktor personaliti terhadap kesejahteraan psikologi dikalangan para pelajar sarjana eksekutif UKM. Kajian ini berbentuk keratan rentas (cross-sectional) dengan kaedah persampelan berstrata yang seimbang (proportional stratified sampling) dan persampelan bertujuan (purposive sampling). Kajian ini melibatkan seramai 75 orang responden yang terdiri daripada pelajar sarjana eksekutif UKM dibawah seliaan Pusat Kembangan Pendidikan (PKP). Pelajar tersebut adalah pelajar semester akhir tanpa pengecualian beban kredit dan belajar pada hujung minggu. Mereka terdiri daripada pelajar Fakulti Kejuruteraan bidang Sarjana Kejuruteraan Industri (SKI), Fakulti Sains dan Teknologi bidang Sarjana Pengurusan Keselamatan Industri (SPKI) dan juga Fakulti Pengurusan Perniagaan bidang Sarjana Pengurusan Perniagaan (SPP). Instrumen kajian yang digunakan dalam kajian ini adalah dengan mengedarkan borang selidik yang terdiri daripada soalan demografi, stres kerja, stres keluarga, stres pendidikan, trait personaliti (*Big Five trait- OCEAN*) NEO-FFI\_APPIKA 2013, IPIP-A2PKA 2013 serta Accua dan soalan kesejahteraan psikologi (*Physiological well being*). Kadar responden yang diperolehi adalah 70 peratus. Data dianalisis menggunakan perisian IBM SPSS Statistik 2.1.

Kata Kunci: Stress, Pelajar Bekerja, Pelajar Master, Kerja sambil belajar

# **INCREASING STUDENTS' MOTIVATION AND LEARNING OUTCOMES THROUGH EXPLORATION APPROACHES TO THE SURROUNDING NATURE (JAS) IN BIOLOGY SUBJECTS FOR PLANTAE CLASS X IPA 2 SMAN 1 SANGKULIRANG**

Musdalifah, [musdalifahdaniel@gmail.com](mailto:musdalifahdaniel@gmail.com), the University of Mulawarman  
Sonja V. T Lumowa, [verasonja@yahoo.com](mailto:verasonja@yahoo.com), the University of Mulawarman Vandalita M.M.Rambitan,  
[vandalitammr@ymail.com](mailto:vandalitammr@ymail.com), the University of Mulawarman

## **ABSTRACT**

This research is to improve the motivation and learning outcomes of students of class X IPA 2 SMAN Sangkulirang with the approach of exploring the natural surroundings (JAS). Classroom action research (CAR) was conducted on 36 students of class X IPA 2 SMAN 1 Sangkulirang. Action Research was carried out in two cycles. Research data obtained from the results of the pre-test and post-test, student motivation observation sheets. Photos in the field. The data were analyzed qualitatively and descriptively and quantitatively. The results showed that the Natural Surroundings (JAS) approach with LKS could increase students' motivation and learning outcomes. Motivation can be known through the percentage of the results of the observation sheets in cycle I (79.56%) and Cycle II (80.09%), (into the good category. In addition, student motivation can also be seen from the results of the student learning motivation questionnaire, namely Cycle I (86.70%) and Cycle II (87.35%) are in the good category. The increase in student learning outcomes can be seen from the average pre-test and post-test, namely in the pre-cycle the pre-test scores (60, 27%). poor category but increased in the Post-Test cycle I (80.55%) and Cycle II pre-test cycle II (67.72) and Post-Test cycle II (81.44%) namely the Good category.

Keywords: Motivation, Learning Outcomes, JAS Approach, LKS.

# THE LOGIC AND SIGNIFICANCE OF EXPERIENTIAL TEACHING IN THE OUTLINE OF MODERN CHINESE HISTORY

Zhou Yue, [zhouyue@student.usm.my](mailto:zhouyue@student.usm.my), Universiti Sains Malaysia

## ABSTRACT

In the new era, the teaching of outline of modern Chinese history is facing new challenges and dilemmas, that is, the difficulty of judging historical facts caused by diversified information in the era of multi-media integration, the dilemma of socialist mainstream culture communication in the field of Pan entertainment, and the obstacle of discipline quality cultivation under the inertia of examination oriented education. The application of experiential teaching adapts to the needs of the development of students' ability in the new era and the teaching of the outline. It enables students to experience the "living" history and makes the course itself more soul. The experiential teaching of the outline course takes the construction of knowledge and experience as the logical starting point, the free and all-round development of students as the fundamental purpose, the transformation of teaching ideas into the basis of survival, and take teaching design as the core. In the whole teaching process of teaching preparation, teaching implementation and teaching evaluation, students can reflect on what they have learned, what they have seen, what they have heard, and what they have thought and doubts, It not only improves the students' recognition of the course, but also enhances the students' learning initiative. It also improves the students' subject core literacy, effectively solves the new challenges and dilemmas faced by the "Outline" course in the new period.

Key words: outline of modern Chinese history; experiential teaching; effectiveness

# TEACHERS AND STUDENTS ON THE IMPLEMENTATION OF ONLINE DISCOVERY MODEL IN LEARNING SPEECH SCRIPTS WRITING

Abdul Rahman, [rafasyah02al@gmail.com](mailto:rafasyah02al@gmail.com), Magister Pendidikan Bahasa dan Sastra Indonesia, FKIP, Universitas Mulawarman

Dr. H.Yusak Hudyono, M.Pd, [yusak.hudyono@fkip.unmul.ac.id](mailto:yusak.hudyono@fkip.unmul.ac.id), Fakultas Keguruan dan Ilmu Pendidikan, Universitas Mulawarman

Dr. Bibit Suhatmady, M.Pd, [bitsuteaching@yahoo.com.au](mailto:bitsuteaching@yahoo.com.au), Fakultas Keguruan dan Ilmu Pendidikan, Universitas Mulawarman

## ABSTRACT

The implementation of learning online with the application of the Discovery model raises perceptions between teachers and students. That is, teachers and students assume in the implementation of the Discovery model online are not as effective as face-to-face learning. Therefore, this study aims to determine the perceptions of teachers and students on the implementation of the Discovery model online in learning speech scripts writing. The research method used is a qualitative method using a case study approach. The population in this study were Indonesian language subject teachers and class XI students. The sample was taken by using purposive sampling technique. Data collection techniques are carried out by filling out a questionnaire through Google Form and also interviews with teachers and students. The results of the study show that the teacher's perception of the implementation of the Discovery model online obtained an average of 73.75% in the good category. While the perceptions of students obtained from the research of an average of 63.06% with a poor category. With this it can be concluded that the perceptions of teachers and students to the application of the Discovery model online are still not good with some obstacles faced in the learning process.

Keywords: Perception, Discovery Model, Speech Script Writing



# **AMALAN KEPIMPINAN MORAL DAN KECERDASAN SPIRITUAL PEMIMPIN SEKOLAH TERHADAP IKLIM SEKOLAH BERKESAN**

Shamsul bin Mohamed Yusak. [shamsul@iab.edu.my](mailto:shamsul@iab.edu.my). Institut Aminudin Baki, KPM

## **ABSTRAK**

Terdapat pelbagai gaya kepimpinan dalam kalangan pemimpin sekolah atau Pengetua dan Guru Besar (PGB) di Malaysia, antaranya ialah kepimpinan Transformasi, kepimpinan Instruksional, kepimpinan Distributif, kepimpinan Lestari dan sebagainya. Setiap gaya kepimpinan mempunyai kekuatan dan kelemahan yang tersendiri dalam menerajui perubahan dan kecemerlangan sekolah. Fokus kajian ini adalah untuk meninjau amalan kepimpinan Moral PGB di sekolah yang dimanifestasikan oleh dimensi Kecerdasan Spiritual dalam mewujudkan iklim sekolah yang berkesan. Di dalam kajian ini kepimpinan Moral dilihat melalui dimensi Membina Komuniti, Mempamer Keadilan, Mempamer Kejujuran, Menghormati Warga Sekolah dan Berkhidmat Untuk Warga Sekolah. Sebagai mediator elemen Kecerdasan Spritual pemimpin sekolah dilihat melalui dimensi Kesedaran Ruhaniah, Ibadah, Ilmu, Akhlak, dan Amanah. Hasil kajian ini diharap dapat menunjukkan kepentingan kepimpinan Moral dalam mewujudkan iklim sekolah yang berksesan. Model kajian ini juga dapat membantu institusi latihan kepimpinan pendidikan dalam merangka modul dan program yang sesuai dalam melahirkan pemimpin sekolah yang bersepadu dengan berintegriti dan berkomited dalam membentuk iklim sekolah yang berkesan.

**Keywords:** Kepimpinan, Kepimpinan Pendidikan, Kepimpinan Moral, Kecerdasan Spiritual, Pemimpin Sekolah, Iklim Sekolah Berkesan, Pengetua dan Guru Besar

# **DESCRIPTION ANALYSIS OF THE INTENSITY OF ATTACK OF BASIDIOMYCOTA FUNGI ON PALM OIL PLANTS, SANDELEY VILLAGE, KUARO DISTRICT, PASER REGENCY**

Pamulasih Gurning, [pamulasihgurning@gmail.com](mailto:pamulasihgurning@gmail.com), the University of Mulawarman  
Didimus Tana Boleng, [didimus\\_tanaboleng@yahoo.com](mailto:didimus_tanaboleng@yahoo.com), the University of Mulawarman

## **ABSTRACT**

Pamulasih Gurning, Descriptive Analisis of Intensity of Basidiomycota fungal Attack in Paser Regency, under the guidance of Desvo W. Rorie and Didimus Tana Boleng. The purpose of this study was to determine the intensity of Basidiomycota fungus attack on oil palm plantations in Sandeley Village, Kuaro District, Paser Regency. This research took place for two months, in sandeley Village, Kuaro District, Paser Regency. The sampling method used the purposive sampling technique, which took the fungus that attacked the oil palm stems in the plot and identified the fungus and made samples from observations. This research is grouped in the type of descriptive research, namely research by taking data at time of the study without giving any prior treatment. The study without giving any prior treatment Based on the results of the study, the intensity of attack of Basidiomycota fungi at the age of 11 years on plots 1-5 averaged 14,8%. The intensity of the attack of the Basidiomycota fungus at the age of 22 years in plots 1-5 was 16,2% on average. The intensity of attack of Basidimycota fungi at the age of 23 years on plots 1-5 was 16,2 % on average.

# **STUDY OF THE EFFECTIVENESS OF THE CONCENTRATION OF SACCHAROMYCES CEREVISIAE IN THE PROCESS OF EXTRACTING BIOETHANOL FROM RICE STRAW (ORYZA SATIVA L.)**

Hariska Swandana, h4riskaswandana@gmail.com, the University of Mulawarman  
Didimus Tanah Boleng, didimus.tanahboleng@yahoo.com, the University of Mulawarman  
Vandalita M.M. Rambitan, vandalitamr@gmail.com, the University of Mulawarman

## **ABSTRACT**

This study aims to determine the effect of giving *Saccharomyces cerevisiae* on rice straw (*Oryza sativa* L.) extract and the effectiveness of its concentration in the process of bioethanol production from rice straw (*Oryza sativa* L.) extract. The results of the study were analyzed statistically with Completely Randomized Design (CRD) with different treatments, namely A0 (control), A1 (5% of *Saccharomyces cerevisiae*), A2 (10% of *Saccharomyces cerevisiae*), A3 (15% of *Saccharomyces cerevisiae*), A4 (20% of *Saccharomyces cerevisiae*). Data analysis was then continued with the calculation of the Least Significant Difference Test at the 5% level. The study showed that the average number of treatments resulted on 1.3% of bioethanol concentration at 5% of *Saccharomyces cerevisiae*, 3% of bioethanol concentration at 10% of *Saccharomyces cerevisiae*, 3.6% of bioethanol concentration at 15% of *Saccharomyces cerevisiae* while at a 20% of *Saccharomyces cerevisiae* the results were only 2% of bioethanol concentration. Based on the results of the study, it is concluded that giving 15% of *Saccharomyces cerevisiae* has a significant effectiveness to bioethanol production from rice straw (*Oryza sativa* L.) extract. Further study is still needed to test the effectiveness of giving *Saccharomyces cerevisiae* to bioethanol production of other rice plant parts and varieties. Keywords: *Saccharomyces cerevisiae*, bioethanol, rice straw (*Oryza sativa* L.)



# **PARALLEL SESSION (ROOM 4)**

# **THE IMPACT OF REMOTE TEACHING ON TEACHERS' READINESS AND CREATIVITY IN LAMPUNG, INDONESIA.**

Dudy Faisal Daulay, dudy.daulay@student.usm.my, Universiti Sains Malaysia

## **ABSTRACT**

As with other countries, Indonesia's educational system has undergone dramatic changes. Remote learning has been used to address the educational emergency generated by the Covid-19 pandemic for nearly two years. Whether ready or not, utilizing technology to replace physical human interaction in the teaching and learning process is the safest course of action. Numerous studies have been conducted to ascertain the effect on students. However, it is deemed necessary to determine teachers' readiness and creativity considering the imminent implementation of online knowledge transfer to their students. The aim of this study is to find out if there is any significant influence as well as the effect size between remote teaching on senior high school teachers' readiness and creativity in Lampung, Indonesia. To carry out the research, data will be collected in a quantitative research method. A combination of closed and open-ended questionnaires will be distributed to 100 senior high school teachers through an online form in Pringsewu Regency, Lampung, Indonesia. This study is going to use three scales, namely the remote teaching scale, the teacher readiness scale, and the teacher creativity scale. They are expected to have a Cronbach-alpha value above 0.70 to indicate that the research is reliable, while the value of internal consistency of item correlation must be above 0.40 to be valid and reliable. Furthermore, the collected data will be analyzed by using multivariate analysis of variance (MANOVA) with SPSS 27. This study aims to advance our awareness of the effect of remote teaching on teachers' readiness and creativity. Additionally, it is hoped that it will provide a better understanding and information about the research variables for educational practitioners in Indonesia and other countries.

Keywords: Educational Management, Remote Teaching, Teacher Readiness, Teacher Creativity

# **STUDENT TEACHERS' PERCEPTION TOWARDS TEACHING AND LEARNING CALCULUS IN INSTITUTE OF TEACHER EDUCATION**

Lavaneesvari Manogaran (PhD), [lavaneesvarimanogaran@ipgm.edu.my](mailto:lavaneesvarimanogaran@ipgm.edu.my), Institut Pendidikan Guru  
Kampus Pulau Pinang

## **ABSTRACT**

Calculus is an utmost importance mathematic course that fosters the understanding of nature and real-life phenomena with the application of problem-solving skills. Many undergraduate courses in Higher Education Institutions in Malaysia emphasize calculus as one of the essential or core courses. Likewise, in the Institute of Teacher Education for student teachers pursuing the bachelor degree of teaching programme (denoted as PISMP) in mathematics for primary education compulsory to complete and pass the calculus course. Thus, this study was conducted to explore the student teachers' perception towards teaching and learning calculus. Purposive sampling was carried out with 116 student teachers at the Institute of Teacher Education in Penang Campus and the data was analyzed using the SPSS Version 27.0. Findings from the descriptive analysis disclosed student teachers had a moderate perception towards teaching and learning calculus. Meanwhile, the inferential analysis revealed student teachers' perception towards teaching and learning calculus was not significant between gender (male vs. female) as well as among origin (rural vs. urban), yet was significantly different based on the dual language programme, DLP (DLP vs. non DLP). It is suggested future studies should focus on the challenges and suggestions to improve the teaching and learning of calculus.

Keywords: perception, teaching and learning, calculus, student teachers

# **CONFLICTS OF BECOMING THE MASTER TRAINERS AND THE TEACHERS: THE UGLY TRUTH OF CEFR ENGLISH COURSE CASCADING IN MALAYSIA SECONDARY SCHOOLS**

Haryati binti Ibrahim, [intan.haryati78@student.usm.my](mailto:intan.haryati78@student.usm.my), Universiti Sains Malaysia  
Hazri bin Jamil, [hazri@usm.my](mailto:hazri@usm.my), Universiti Sains Malaysia

## **ABSTRACT**

This article presents a qualitative investigation of teachers' self-evaluation while having a role as master trainer in the CEFR course cascading and the impact of cascading the courses at different tiers among secondary school teachers in Johor, Malaysia. The research explores the experience of the trainers and their perceptions of their roles while cascading the course as well as while attending the course as the participant. This research intends to cater with two research questions; i.e. what are the challenges faced by the CEFR Master Trainers in Malaysia in cascading the CEFR syllabus and assessment courses and what are the experience of the teachers while both cascading and attending the courses at different tiers . The studies revelation suggests that the problems the Master Trainers encountered were lack of the comprehension of the content, lack of confidence and self-efficacy and time constraint. The findings also enlightened on the experience and self -reflection, both from the Master Trainers and teachers' point of view. The Master Trainers must be aware of the effective approaches in cascading the content knowledge and be given sufficient support to enhance the mastery of the syllabus and at the same time the teachers should be given ample opportunity to display their own comprehension towards the syllabus first in the classroom.

Keywords: course cascading, content knowledge transfer, CEFR course, Master Trainer

# THE INFLUENCE OF VIRTUAL LITERATURE CIRCLES ON IB DIPLOMA STUDENTS' LITERARY COMPETENCE

Nasharil Nazrin Ramli, [nasharil.nazrin@mckk.edu.my](mailto:nasharil.nazrin@mckk.edu.my), Universiti Sains Malaysia

## ABSTRACT

This mixed-method study investigated how virtual literature circles provide optimal learning opportunities to promote International Baccalaureate (IB) Diploma students' literary competence in reading literature. The research questions focused on the ways that virtual literature circles are able to support students' literary reading comprehension and literary analysis skills, as well as their experiences upon participating in the discussions. The quantitative data was collected through a quasi experimental method focusing on two groups of IB Diploma students in the experimental and control groups. The experimental group students were taught using virtual literature circles, whilst the control group using the literature studies approach. One-way analysis of covariance (ANCOVA) was used to determine whether there are any significant differences between the independent groups on the dependent variables: literary reading comprehension and analysis skills whilst controlling for the effects of their initial abilities, which co-vary with the dependent variables. The qualitative data were collected using semi-structured interviews, and the data analysis was conducted using principles of thematic analysis. This study found that virtual literature circles enhanced IB Diploma students' literary competence by encouraging them to become critical readers of literature. It also provides students with the avenue to develop their literary reading comprehension and analysis skills in order to understand, analyse and interpret literature critically.



# I-WRIGHT: A DEVELOPMENT OF GAME-BASED WRITING MODULE FOR ESL LEARNERS

Nur Yasmin Khairani Zakaria, [yasminzakaria@student.usm.my](mailto:yasminzakaria@student.usm.my), Universiti Sains Malaysia, Universiti  
Kebangsaan Malaysia

Amelia Abdullah, [amelia@usm.my](mailto:amelia@usm.my), Universiti Sains Malaysia

Siti Nazleen Abdul Rabu, [snazleen@usm.my](mailto:snazleen@usm.my), Universiti Sains Malaysia

## ABSTRACT

Implementation of gamification resulted in motivational, challenging and fun learning experience to the learners. In the current context of education, game-based learning (GBL) is perceived as the preferred term by practitioners in education field. Game-based learning is referred as the implementation of games in teaching and learning activities with the main goal to enhance students' motivation in learning. Despite of multiple suggestion of the benefits of game-based learning, attention has been given to improve language learning in second language learning context. Therefore, this concept paper proposes to discover ESL students' needs to improve their academic writing before developing a learning module integrated with game-based learning approach. In this study, 40 ESL students who enroll for academic writing course will be purposely selected to respond on their needs in academic writing course. Findings in the needs analysis phase are crucial to determine the content of the game-based learning module for academic writing skills. Their responses will be further enriched with feedbacks from ESL experts which will serve as a foundation for the prototype development later. Experts' feedbacks on this are important to ensure that the contents are aligned with the course objectives and for further improvement before it is implemented to the students. Findings expected from this study are useful for academic writing course instructors in developing an effective learning module for second language learners particularly in improving their academic writing skills.

Kata kunci: Game-based assessment, gamification, academic writing skills, language learning, English as a Second Language (ESL)

# THE EFFECTIVENESS OF ANIMOTO IN LEARNING LITERATURE AMONG ESL UPPER SECONDARY SCHOOL STUDENTS

Vanhitha Kernagaran, [vanhikerna@student.usm.my](mailto:vanhikerna@student.usm.my), Universiti Sains Malaysia  
Amelia Abdullah, [amelia@usm.my](mailto:amelia@usm.my), Universiti Sains Malaysia

## ABSTRACT

Literature is one of the essential components in learning the English language at secondary schools in Malaysia. Past studies found that the students do not show interest in learning literature in English. Thus, the researcher aimed to see whether technology tools such as Animoto can be used as a medium to improve the learning of literature among form four ESL students. The primary purpose of this study is to measure the acceptance level of Animoto in English literature classrooms. Sixty students who were selected using convenience sampling had participated in Animoto integrated classroom for two weeks. The TAM model questionnaires adapted from Fred Davis (1989) with four main constructs such as Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Attitude towards Animoto Use (ATAU), and Intention to Use (ITU) were distributed to all the 60 participants of the study by the end of 2 weeks. Data were analysed using both SPSS and SmartPLS software. The results revealed that PU and PEOU have a significant positive relationship with ATAU, and ATAU has a significant positive relationship with ITU. The  $R^2$  value is 0.362, suggesting that PU and PEOU can explain 36.2% of the variance in the extent of ATAU, whereas 48.6% of the variance in the Intention to Use (ITU) can be explained by the extent of ATAU. Finally, this study provides some implications of the study and recommendations useful for future researchers to expand their study in this area. In addition, this study too provides information and opportunity for teachers to use the web 2.0 tool Animoto in their literature classes. Therefore, teachers could adjust their teaching methodology, leading to effective technology-integrated teaching and learning of literature.

Keywords: Animoto, TAM Model, ESL classroom, Technology Integration

# THE USE OF TITA TECHNIQUE AND PICTURE WHEEL IN IMPROVING WRITING SIMPLE PRESENT TENSE SENTENCES

Yuvarani Saravana Sami, [yuvarani80@yahoo.com](mailto:yuvarani80@yahoo.com), SJK(T) Taman Tun Aminah

## ABSTRACT

This research was conducted to find out whether or not the use of TiTa could help to improve pupils' writing. The data for the study were obtained from twenty pupils of Year 5 Thunivu in SJK(T) Taman Tun Aminah, Johor. These pupils were targeted due to their low level of proficiency in English language. TiTa was used as the strategy as the pupils were lack of simple grammar thus affecting their language learning. This is an action research and data gathering method such as pupils' work, was used. The findings of this study proved that the use of TiTa helped to improve the pupils' simple present tense as the pupils were able to remember Ti as There is and Ta as There are and know how to use them in the right context. Picture Wheel is used to help students to visualise the objects. It also helped to encourage their participation and promote their interest. Based on my past teaching experiences, I noticed that most of the pupils had difficulties in learning grammar that leads to their poor writing. Grammar is important in reading comprehension because it is part of background knowledge. We should bear in mind that grammar plays an utmost significant role in English language and it is an inseparable part of any language learning process.

Keywords: simple present, verb to-be, writing, grammar

## **ETC RPG: 3D ROLE-PLAYING GAME TO INCREASE STUDENTS' MEMORIZATION IN ELECTRON TRANSPORT CHAIN SUBTOPIC**

Nur Nadiah Binti Zaini, [nnadiahholic@gmail.com](mailto:nnadiahholic@gmail.com), Kolej Matrikulasi Negeri Sembilan, Malaysia.  
Sophie Binti Tarmizi, [sofie@kmns.matrik.edu.my](mailto:sofie@kmns.matrik.edu.my), Kolej Matrikulasi Negeri Sembilan, Malaysia.

### **ABSTRACT**

Electron Transport Chain is a subtopic under Cellular Respiration that involves series of processes. Reports from past Laporan Kerja Calon and observation in class showed that students did not perform in this subtopic due to incorrect use of terms due to lack of memorization on the complex names and processes involved thus fail to explain contextually. Whitehead and McNiff's Model (2006) are used to complete our action research. The intervention used is ETC RPG, a 3D role-playing game designed to improve students' performance in this subtopic as an active retrieval-based activity compared to conventional rote learning. The game is a simulation of ETC and took less than 3 minutes to complete. A 4- point Likert scale survey consisting of 10 question was administered to 15 SES students as respondents in addition to 10 questions of Pre and Post Test to analyze the effectiveness of ETC RPG. Post-test results showed a significant increase in students' performance where all 15 students scored 80% and above in comparison to pre-test where only 4 students scored 80%. Data from the survey showed that ETC RPG promotes students' understanding on Electron Transport Chain, induce independent learning through curiosity and self-driven motivation to learn.

Key words: Gamification, Biology, Electron Transport Chain, Online game.

# **GENDER DIFFERENCES OF EFL STUDENTS' ABILITY IN ACADEMIC WRITING**

Abdullah Humaid Abdullah Al Abri. [abdullah.alabri@nct.edu.om](mailto:abdullah.alabri@nct.edu.om)

## **ABSTRACT**

This study seeks to investigate gender differences in academic writing in an EFL context. The majority of previous studies have explored the overall achievement in writing among males and females, or in many cases, one area of writing (e.g., spelling). There is therefore a need to pinpoint how gender affects writing achievement. This paper sought to address five specific areas of writing which were content, organization, lexical resources, grammatical accuracy and mechanics among males and females. The study was conducted at a public college in Oman, and the participants were 119 males and 130 females. This study implemented a descriptive quantitative design by administering a writing test and then marking the writing scripts based on marking rubrics that included the five target areas of writing to identify any statistically significant difference between males and females. The results of the study indicated that female students achieved higher scores in content, organization, lexical resources, grammatical accuracy and mechanics than male students. The study proposes some practical implications for educators and some suggestions for future directions.

Keywords: EFL, gender, writing, academic

# THE CASE STUDY ON THE MOTIVATIONS TOWARDS USING ICT IN ENGLISH TEACHING AND LEARNING IN CHINA

Zhang Hui, [zzhanghui@student.usm.my](mailto:zzhanghui@student.usm.my), Universiti Sains Malaysia

## ABSTRACT

ICT application is a crucial aspect to improve the quality of teaching English in China. As for English teachers, the motivations for them to use ICT are the biggest issue under Chinese education informatization. Thus, this study aimed to explain the present situation of Chinese teacher using ICT in English teaching and learning in China. Besides, various types of motivations towards this aspect and why it is motivated were also determined. There were three participants from a college in Baoji City, Shaanxi Province in China who are required to have an online Focus Group Interview and write a diary as a document. Throughout the investigating interview and analyzing document, we learn that types of motivations of using ICT have the effect on English teaching, and also, some elder teachers are unwilling to apply advanced technology in their teaching activity whereas, the younger teachers have no chance to use. In the end, the reasons why teachers seldom use ICT in China are explained to make a better understanding of the present situation. Also, some suggestions and recommendations are listed to encourage teachers to apply ICT more in the future.

Key words: ICT application, motivation, English teaching and learning in China.

# LEVEL OF PSYCHOLOGICAL EMPOWERMENT AMONG TEACHERS IN SAUDI SCHOOL

Maha Algohani, [mahaalgohani@student.usm.my](mailto:mahaalgohani@student.usm.my) , Universiti Sains Malaysia  
Dr. Al Amin Mydin, [alamin@usm.my](mailto:alamin@usm.my), Universiti Sains Malaysia

## ABSTRACT

Empowerment generally means transferring responsibility and authority to make decisions to employees (Ford et al., 1995). One of the main obstacles to reform in education in Saudi Arabia is centralization (Alyami, 2016). In Saudi Arabia schools, the duties of school administrators are limited to certain works and operations, which greatly impede the empowerment of teachers. Teachers are only involved in teaching tasks but not in decision-making processes (Allmnakrah & Evers, 2020). For instance, the determination of educational programmes, textbooks and even the methods and techniques used in the classroom centrally restrict the independence of teachers (Alonazi, 2017). This has a negative impact on empowerment, which aims to promote professionalism in teaching, which is allegedly very influential in school and classroom. This is confirmed by the study of Alqahtani, Noman and Kaur (2020) demonstrated that the school principal did not share with teachers the goals of the school; although, they set the goals that they considered good for their schools. As a result, the school faced problems with teachers' commitment and discipline as the principal said. In contrast, since the Ministry of Education considers teachers to be contributing to increasing educational outcomes (Alyami, 2016). There are school principals have an important responsibility to empower teachers. Despite the fact that the educational institution in the centralized Saudi education system specifically defines teachers' duties, school administrators may address this problem by making effective use of their energy resources. Many studies in the literature have found that employees' attitudes towards their jobs are influenced by the behaviors shown by school principal. For instance, Al Harbi, Alarifi, & Mosbah, (2019), found that the relationship between transformational leadership and followers' creativity, through the mediating role of employees' psychological empowerment, support for innovation, workplace relationships and employee learning, was found to be both positive and significant.

# **PENGAMALAN DAN KEBERKESANAN TEKNIK NEUROFISIOLOGI DALAM MENINGKATKAN KEMAHIRAN BACAAN AL-QURAN DI PULAU PINANG**

Nur Diyana Mohamad, [diyana@kitab.edu.my](mailto:diyana@kitab.edu.my), Kolej Islam Teknologi Antarabangsa  
Nur Farhana Abdul Aziz, [nur\\_farhana@kitab.edu.my](mailto:nur_farhana@kitab.edu.my), Kolej Islam Teknologi Antarabangsa  
Zarifah Omar, [zarifahomar2014@gmail.com](mailto:zarifahomar2014@gmail.com), SMK Datuk Haji Ahmad Said  
Zuhaidi Othman, [tzoalc@gmail.com](mailto:tzoalc@gmail.com), Minda AQ  
Prof. Madya Dr. Salmiza Saleh, [salmiza@usm.my](mailto:salmiza@usm.my), Universiti Sains Malaysia

## **ABSTRAK**

Neurofisiologi adalah bidang yang berkaitan dengan fungsi otak dan sistem saraf yang menjelaskan tentang fungsi penerimaan, pemprosesan dan penyampaian maklumat. Antara keunikan modul ini adalah bacaan Al-Quran dengan turut mengingat nombor ayat dan pada masa yang sama dapat memaksimumkan fungsi keupayaan otak. Kini, kaedah bacaan Al-Quran telah mengalami anjakan transformasi daripada hanya kaedah tradisi kepada kaedah-kaedah yang lebih moden. Sungguhpun begitu, teknik dan kaedah pengajaran dan pembelajaran Al-Quran dan kajian-kajian berkaitan dengan kemahiran membaca Al-Quran amat kurang dijalankan khususnya kajian yang melibatkan pengajaran dan pembelajaran Al Quran. Justeru, kajian ini dijalankan bagi mengenal pasti Pengamalan Dan Keberkesanan Teknik Neurofisiologi Dalam Meningkatkan Kemahiran Bacaan Al-Quran Di Pulau Pinang. Data dikumpul secara kualitatif melalui kaedah temubual berstruktur yang dikemukakan kepada pelajar yang menghadiri modul ini dan semi- struktur terpilih yang terdiri tenaga pengajar yang mengendalikan kelas-kelas pengajaran dan pembelajaran Al-Quran. Ia juga berfungsi sebagai penjelasan kepada data-data yang dikumpul melalui tinjauan laman sesawang pusat pengajian ini. Persampelan dalam kajian ini menggunakan rawak mudah kepada pelajar yang mengikuti program modul asas bacaan Al-Quran. Sampel terdiri dari 64 orang pelajar campuran lelaki dan perempuan bagi temubual berstruktur dan 3 orang tenaga pengaar bagi temubual semi- struktur. Secara keseluruhannya, Modul Nadi Al-Baghdadi ini merupakan sebahagian dari kaedah pembelajaran dan pengajaran yang tercetus daripada perkembangan semasa pendidikan Al-Quran di mana keperluannya begitu memberi impak jauh lebih berkesan pada majoriti besar pelajar yang masih belum boleh membaca Al-Quran. Modul pembelajaran disusun lengkap dan memenuhi keperluan pembelajaran seperti yang mendapat perhatian dalam pelbagai cabang kajian berkenaan masalah pendidikan.

Kata kunci: Neurofisiologi, Kemahiran dan Kaedah Bacaan Al-Quran, Modul Nadi Al-Baghdadi



# PEMBINAAN DAN PENGESAHAN UJIAN DIAGNOSTIK KOGNITIF BERBENTUK DUA-PERINGKAT UNTUK MENGENAL PASTI MISKONSEPSI UNGKAPAN ALGEBRA

Khong Wei Seng, [seanson.kws85@yahoo.com](mailto:seanson.kws85@yahoo.com), Universiti Sains Malaysia  
Prof. Madya Dr. Lim Hooi Lian, [hlim@usm.my](mailto:hlim@usm.my), Universiti Sains Malaysia

## ABSTRAK

Ujian Diagnostik Kognitif Operasi Mudah Ungkapan Algebra (UDKOMUA) dibina dalam kajian ini untuk mengenal pasti miskonsepsi murid tingkatan satu dalam topik operasi mudah (+, -, ×, dan ÷) ungkapan algebra. Instrumen UDKOMUA dalam bentuk dua-peringkat (two-tier) beraneka pilihan dibina berdasarkan model CDA (Cognitive Diagnostic Assessment) dijangka melibatkan 1500 orang murid tingkatan satu dari 15 buah sekolah menengah di seluruh negeri Pulau Pinang. Justeru, kajian ini dijalankan untuk (a) menentukan pekali kebolehpercayaan, kesahan kandungan dan darjah kesahan konstruk UDKOMUA yang dibina, (b) mengenal pasti jenis miskonsepsi yang dilakukan oleh murid tingkatan satu berdasarkan kebolehan murid dalam keluk OPC (Option Probability Curves) untuk operasi mudah ungkapan algebra melalui analisis Rasch di pilihan jawapan murid (peringkat-pertama, tier-1), (c) mengenal pasti jenis pemikiran kognitif murid tingkatan satu berdasarkan kebolehan murid dalam keluk OPC melalui alasan murid (peringkat-kedua, tier-2), (d) mengenal pasti kolerasi yang signifikan antara pilihan jawapan murid dengan pilihan alasan murid dalam instrumen UDKOMUA, dan (e) mengenal pasti perbezaan analisis miskonsepsi murid dalam operasi mudah ungkapan algebra melalui analisis Rasch dengan analisis Teori Ujian Klasik (CTT). Untuk menjamin kesahan dan kebolehpercayaan kajian ini, analisis model Rasch dari aspek polariti item koefisien kolerasi ukuran-titik (PTMEA CORR), nilai jumlah min kuasa dua infit dan outfit MNSQ, unidimensi nilai ambang, semakan skala lengkung kebarangkalian (probability curves), tentukan sekatan (calibration threshold), nilai struktur tentukan (structure calibrain), kesahan konstruk under-representative semakan wright map (item-person map), ujian pembezaan fungsi item (DIF), darjah kebolehpercayaan item, darjah kebolehpercayaan Person, kesahan kandungan nilai CVI (Content Validity Index), dan indeks kebolehpercayaan item dan responden dinilai lalu dilaporkan. Analisis miskonsepsi murid dalam operasi mudah ungkapan algebra dijalankan dengan analisis pengganggu (distractor analysis) melalui keluk OPC. Selain itu, ujian pekali korelasi Pearson  $r$  juga dijalankan untuk mengenal pasti kolerasi antara pilihan jawapan murid dengan pilihan alasan murid. Di akhir kajian ini, perbezaan jenis-jenis miskonsepsi ungkapan algebra murid melalui analisis model Rasch dan analisis CTT dibandingkan dan dilaporkan.

Kata kunci: Miskonsepsi ungkapan algebra, CDA, two-tier diagnostic test, analisis pengganggu, model Rasch

# PEMILIHAN KATA PERINTAH DAN KEEFEKTIFAN DALAM PUISI BHARATHIDASAN

Malarvali Sanggaran, [malar2727@yahoo.com](mailto:malar2727@yahoo.com), Universiti Malaya.  
Mohana Dass Ramasamy, [mohana\\_dass@um.edu.my](mailto:mohana_dass@um.edu.my), Universiti Malaya.  
Sivapalan Govindasamy, [gsiva\\_palan@um.edu.my](mailto:gsiva_palan@um.edu.my), Universiti Malaya.

## ABSTRAK

Kajian tinjauan ini bertujuan untuk pemilihan kata perintah dan keefektifannya dengan menggunakan model skala tekanan bahasa terhadap puisi terpilih Bharathidasan yang membawa kepada reformasi dalam kalangan masyarakat. Kajian lepas terhadap puisi Bharathidasan merangkumi aspek sejarah pemuisi, gaya bahasa puisi, kehebatan puisi dan keindahan metafora. Kajian teliti terhadap pemilihan kata puisi dari segi kata perintah terhadap puisi Bharathidasan tidak pernah dijalankan sebelum ini. Kata perintah yang hadir dalam sesuatu puisi mencerminkan ketegasan atau kelembutan puisi yang membantu dalam mencungkil minda pembaca. Ia juga akan membawa reformasi dalam komuniti. Kajian ini dapat meneliti kata perintah dalam puisi Bharathidasan dan skala ketegasan rendah ke tinggi dengan menggunakan model pilihan bahasa. Kajian ini menggunakan metodologi kajian berbentuk kajian kepustakaan dalam menganalisis puisi Bharathidasan. Reka bentuk kaedah analisis tekstual digunakan untuk pemahaman terhadap struktur puisi. Teori kata perintah jenis *eeval vinaimuRRu* dan *viyangkooL vinaimuRRu* diperhalusi dalam puisi terpilih Bharathidasan. Seterusnya model skala tekanan bahasa dan cara pengukuran keefektifan kata perintah juga dibincangkan. Perbincangan kata perintah, diberikan jenis kata perintah mengikut teori ahli akademik bahasa Tamil. Seterusnya kata perintah tersebut dibincangkan keberkesanan dengan menggunakan model skala tekanan bahasa. Seterusnya analisis dapatan kajian dan kesimpulan kajian. Sebagai kesimpulan, penyelidikan ini merumuskan implikasi kajian dan signifikansi kajian.

Kata kunci: puisi, Bharathidasan, keefektifan kata perintah

# PROMOTING PRIMARY PUPILS' CONCEPTUAL UNDERSTANDING OF GEOMETRICAL MEASUREMENT

Siti Nur Annisa Mohd Nasser, [sitinurannisa177@gmail.com](mailto:sitinurannisa177@gmail.com), Universiti Sains Malaysia.  
Lim Hooi Lian, [hllim@usm.my](mailto:hllim@usm.my), Universiti Sains Malaysia.

## ABSTRACT

Geometrical measurement is a crucial topic as it connects mathematics to the real world and serves as a foundation for studying other topics. However, pupils demonstrate low achievement and confusion in understanding the concept of geometrical measurement. One of the factors contributing to the lack of understanding is that geometrical measurement is typically taught and understood using rules, procedures, and formulas rather than addressing the underlying concept. Research has proven that solid conceptual understanding ensures great geometrical measurement performance. Therefore, understanding geometrical measurement in both conceptual area and skill is critical. Thus, the main objective of this study is to identify the specific types of geometrical measurement skills that contribute to geometrical measurement conceptual understanding. The results of this study indicated that in order to grasp the conceptual understanding of geometrical measurement, pupils need to be competent in geometrical measurement skills. According to the literature, geometrical measurement skills involve both spatial and numerical skills in order for pupils to visualize and begin to formulate and abstract the enumeration process in terms of formulas. Thus, the findings of this study led us to draw conclusions on the skills that guide primary-level pupils to grasp conceptual understanding in geometrical measurement. Subsequently, the findings may also provide guidance for potential researchers and teachers to evaluate pupils' performance in geometrical measurement such as developing an alternative assessment tool. This allows for a precise assessment of primary-level pupils' understanding of the underlying concept of geometrical measurement.

Keywords: Geometrical Measurement; Geometrical Measurement Skills; Numerical Skills; Spatial Skills

# **BENTUK DAN FUNGSI RUMAH BESAR RAJA BILAH DI PAPAN DAN PERANANNYA TERHADAP MASYARAKAT MANDAILING DI PERAK 1896-1940**

Nor Haslinda Abdul Halim Khoo, [M20191000687@siswa.upsi.edu.my](mailto:M20191000687@siswa.upsi.edu.my), Universiti Pendidikan Sultan Idris

Yunus Sauman Sabin, [Yunus.sauman@fsk.upsi.edu.my](mailto:Yunus.sauman@fsk.upsi.edu.my), Universiti Pendidikan Sultan Idris

## **ABSTRAK**

Artikel ini membincangkan tentang Bentuk dan Fungsi Rumah Besar Penghulu Raja Bilah di Papan yang dibina pada tahun 1896 dan peranannya terhadap masyarakat Mandailing di Perak sehingga 1940. Objektif penulisan ini ialah membuktikan tentang kewujudan Rumah Besar tersebut sebagai simbol kepada penyatuan dan kekuatan masyarakat Mandailing di Perak semenjak akhir kurun ke-19. Pengkaji menggunakan kaedah kualitatif dengan pendekatan sejarah iaitu mendapatkan bahan, menilai kesahihan, menganalisis kandungan dan seterusnya mensintesis bahan menjadi sebuah karya sejarah. Hasil penelitian menunjukkan bahawa Rumah Besar Penghulu Raja Bilah di Papan dibina sejurus selepas kehadiran masyarakat Mandailing berhijrah ke Ipoh pada tahun 1896 iaitu selepas Raja Bilah dilantik sebagai penghulu. Senibina Rumah Besar ini menggunakan campuran kayu dan batu untuk menghasilkan struktur bangunan dua tingkat. Gaya senibina Rumah Besar ini mengikut gaya senibina kompleks rumah tradisonal Mandailing iaitu Bagas Godang. Bagas Godang bagi masyarakat Mandailing dirujuk sebagai rumah kediaman seorang raja atau ketua marga. Bagi masyarakat Mandailing, raja tidak hanya berperanan sebagai ketua adat, tetapi mereka adalah orang yang dapat menyelesaikan berbagai masalah di permukiman adat tersebut. Rumah Besar ini juga berfungsi sebagai tempat berkumpul masyarakat Mandailing dari pelbagai marga yang telah tersebar ke seluruh Perak seperti di Papan, Gopeng, Batu Gajah, Chemor dan Batang Padang. Sebagai kesimpulan, Rumah Besar Raja Bilah ini telah berfungsi sebagai ikon kepada penyatuan dan kekuatan masyarakat Mandailing di Perak sebelum Perang Dunia Kedua. Walau bagaimanapun, pada hari ini, rumah tersebut semakin usang dan terbiar sepi. Justeru kajian ini boleh dijadikan sebagai sandaran dan panduan asas kepada mana-mana pihak yang mencintai sejarah dan warisan negara dalam usaha untuk memulihara Rumah Besar tersebut.

Kata kunci: Bagas Godang; Rumah Besar; Raja Bilah; Masyarakat Mandailing

# MODUL INTERVENSI KOG BACA UNTUK KEMAHIRAN DEKODING MURID DISLEKSIA

Noor Syahida binti Md Zuki, [syahida.mdzuki@gmail.com](mailto:syahida.mdzuki@gmail.com), Universiti Sains Malaysia  
Aswati binti Hamzah, [aswati@usm.my](mailto:aswati@usm.my), Universiti Sains Malaysia  
Shahabuddin bin Hashim, [shah@usm.my](mailto:shah@usm.my), Universiti Sains Malaysia

## ABSTRAK

Disleksia merupakan masalah pembelajaran spesifik bagi murid yang mengalami kesukaran mengecam dan membaca dengan tepat, kebolehan ejaan serta kemahiran dekoding yang lemah. Mereka tidak mampu untuk memahami bunyi sesuatu bahasa dan menghubungkan bentuk huruf kepada bunyi (Swanson & Alloway, 2011). Murid disleksia memerlukan kaedah pengajaran dan intervensi yang spesifik untuk meningkatkan keupayaan mereka (Zulkifli Mahmoodin et al., 2018). Objektif modul intervensi ini dibina bertujuan untuk memberi panduan pengajaran kepada guru dengan memahami masalah sebenar yang dihadapi oleh murid disleksia berdasarkan kajian dan penyelidikan di dalam dan di luar negara. Modul ini merupakan suatu panduan mengenai keupayaan kognitif murid disleksia berdasarkan bukti neurosains. Kajian neurosains ini lebih menjurus kepada faktor dan punca disleksia di dalam fungsi otak (Aldrich, 2013). Modul intervensi yang dibina ini akan memberikan pengetahuan dan pemahaman terhadap fungsi kognitif. Seterusnya, ia dapat memberikan pengalaman baharu kepada guru-guru pendidikan khas dan inklusif terutamanya yang mengajar murid disleksia. Reka bentuk pengajaran Modul Intervensi Kog-BACA ini adalah berdasarkan Teori Beban Kognitif (*Cognitive Load Theory*), Model Memori Kerja Baddeley dan *Model Dual Route Cascades*. Strategi pengajaran yang digunakan adalah latihan memori kerja seperti pengulangan, cerakin, visualisasi dan metakognitif yang akan membantu meningkatkan keupayaan memori kerja dan kemahiran dekoding. Latihan ini merupakan satu kaedah intervensi yang bertujuan untuk meningkatkan kapasiti penyimpanan dan pemrosesan memori kerja. Manakala, kemahiran membaca yang menumpukan kepada kesedaran fonologi (*phonological awareness*) bagi meningkatkan keupayaan fonologi iaitu keupayaan terhadap bunyi huruf. Proses pembangunan modul ini melibatkan pembinaan draf modul intervensi berdasarkan model ADDIE iaitu (*Analysis, Design, Development, Implementation, Evaluation*). Diharapkan agar modul ini dapat memberikan pendekatan baharu terhadap pelaksanaan program intervensi sekolah berdasarkan kajian penyelidikan terkini dan mencetus perspektif baharu dalam bidang pendidikan terutamanya dalam bidang pendidikan khas di Malaysia.

Kata kunci: Disleksia, memori kerja, *decoding*, *phonological awareness* dan pembangunan modul

# THE BIG FIVE PERSONALITY APPLICATION

Yap Chiou Shum, [chioushumyap@gmail.com](mailto:chioushumyap@gmail.com), Universiti Sains Malaysia  
Shahabuddin Hashim, [shah@usm.my](mailto:shah@usm.my), Universiti Sains Malaysia  
Bibi Nadiyah Yaakub, [bizarizka@gmail.com](mailto:bizarizka@gmail.com), Universiti Sains Malaysia  
Nurul 'Ain Abdul Halim, [nurulain2685@gmail.com](mailto:nurulain2685@gmail.com), Universiti Sains Malaysia

## ABSTRACT

The Big Five Personality Test is used to identify the personality of a person through the traits of five personality domains (Openness to Experience, Conscientiousness, Extraversion, Agreeableness and Neuroticism) using analysis factor. Normally, the Big Five Personality Test is carried out by reading the statements, rating each statement with scale 1-5, calculating the score obtained for the five domains and identifying the personality based on the score. The whole process is dull and time-consuming especially the calculating of the scores. There are many Big Five Personality Test applications on Play Store which are free but most of them receive bad reviews from the users which is the application is not working, the explanation is not complete, too much advertisements and users need to make payment in order to get the result of the test. Therefore the objective of the Big Five Personality application is to enable users to take the test in a fun, free and easy way besides identify their personality traits. It is environmental friendly as users do not need to take the test on paper. There is sound effect and soft instrumental music throughout the test and user will not feel burden to answer 50 questions. Users do not need to calculate the score manually as the score will be generated at the end of the test. Once the assessment has begun, users read the statement and hit the bubble that represents score 1-5, where 1=disagree, 2=slightly disagree, 3=neutral, 4=slightly agree and 5=agree. After users answer all the statements, the score for the five personality traits will be shown. This test uses the Big-Five Factor Markers from the International Personality Item Pool, developed by Goldberg (1992). The Big Five Personality application is created by using the Construct 3 software, a game making software. Storyboard is made before the Big Five Personality application is created. The Big Five Personality application can be used to identify the dominant personality trait of a person and helps school to plan suitable education programme for pupils with different personality traits so that pupils are able to develop their potentials. The Big Five Personality application has not received any recognition yet. The application has commercialisation potential as it is easy to use, the result of the test can be generated automatically and there will be no error in the calculation of the score for each personality domain. However, the Big Five Personality application is not adapted to user with some form of disability. Hopefully one day there will be a Big Five Personality application with the integration of voice assistants and haptic feedback such as vibrations, in order to create an accessible user experience for all users, including those with a disability or impairment.

Keywords: Big Five Personality Test application, personality traits, automatically-generated marks, commercialisation potential

## PLATFORM DALAM PEMBELAJARAN SEJARAH ATAS TALIAN

Norrolnadia binti Tajudin, [norrolnadia@student.usm.my](mailto:norrolnadia@student.usm.my), Universiti Sains Malaysia.  
Prof. Madya Dr. Shahabuddin bin Hashim, [shah@usm.my](mailto:shah@usm.my), Universiti Sains Malaysia

### ABSTRAK

Dunia teknologi telah berkembang dengan pesatnya sehinggalah berlaku perkembangan teknologi berbentuk digital yang digunakan pada masa kini. Teknologi digital ini sedikit sebanyak telah merealisasikan pembelajaran atas talian yang mula dilaksanakan sepenuhnya apabila COVID-19 melanda dunia. Oleh itu, pelbagai platform telah diperkenalkan dalam teknologi digital ini seperti *Whatsapp*, *Telegram*, *Google Classroom*, *Zoom*, *Youtube*, *Kahoot* dan sebagainya. Platform ini telah menjadi pengganti kepada bilik darjah dalam pembelajaran atas talian ini. Justeru, kesemua platform tersebut mempunyai kekuatan yang tersendiri untuk menyokong keberkesanan pelaksanaan strategi pembelajaran abad ke-21 yang menekankan kepada konsep 4C iaitu *communication*, *collaboration*, *critical thinking* dan *creativity*. Kebanyakan platform ini juga telah dilengkapi dengan pelbagai ciri yang membolehkan guru menguruskan kelas dengan lebih berkesan seperti penyimpanan data, kalendar, *powerpoint* dan sebagainya. Pelbagai aktiviti pembelajaran berasaskan teknologi dapat dilaksanakan dalam pembelajaran atas talian yang sebelum ini terbatas dalam pembelajaran bilik darjah. Namun, semua platform ini berfungsi dengan adanya rangkaian Internet. Hal ini telah memberikan kesukaran kepada pelajar yang tidak mempunyai kemudahan teknologi dan pelajar yang berada diluar bandar. Jurang inilah menjadi salah satu cabaran dalam merealisasikan pendidikan berasaskan teknologi. Platform ini merupakan medium yang masih baharu dalam pembelajaran Sejarah dan masih belum diterokai sepenuhnya oleh guru kerana kebanyakan guru Sejarah sebelum ini masih terikat dengan pembelajaran dalam bilik darjah. Implikasinya, pelaksanaan pembelajaran atas talian ini telah memberikan impak yang besar kepada guru Sejarah untuk keluar dari 'kepompong' pembelajaran yang bersifat tradisional dan sehalu. Oleh itu, pendidikan di Malaysia perlu mengambil langkah yang efektif dalam menerapkan penggunaan teknologi secara maksimum dalam kalangan guru. Penyelidikan masa hadapan perlu memberikan pendendahan secara terperinci setiap platform yang sesuai digunakan oleh para guru Sejarah.

Kata kunci: platform, pembelajaran atas talian, pembelajaran sejarah



# KEBERKESANAN KAEDAH KOPERATIF JIGSAW II TERHADAP PROSES PENINGKATAN PRESTASI PELAJAR DALAM MATA PELAJARAN SEJARAH STPM

Kulasingam Kunaggaran, [kulasingam@student.usm.my](mailto:kulasingam@student.usm.my), Universtiti Sains Malaysia  
Shahabuddin bin Hashim, [shah@usm.my](mailto:shah@usm.my), Universiti Sains Malaysia

## ABSTRAK

Masalah utama yang selalu timbul dalam pembelajaran dan pemudahcaraan (pdpc) mata pelajaran sejarah STPM adalah kesukaran memahami konteks subjek sejarah yang dipelajari disamping persekitaran pembelajaran yang membosankan. Pembelajaran koperatif jenis Jigsaw II jarang digunakan dalam pdpc mata pelajaran Sejarah STPM kerana para guru masih menggunakan kaedah tradisional dan kurang mahir dalam Teknik Jigsaw II. Situasi ini telah menyebabkan pelajar merasa bosan dan sukar memahami maklumat yang cuba disampaikan oleh guru. Secara khususnya, penyelidik ingin mengkaji keberkesanan kaedah pembelajaran koperatif Jigsaw II dalam meningkatkan kefahaman pelajar STPM memahami konteks subjek sejarah melalui lima tahap yang dilaksanakan oleh Jigsaw II yang digariskan oleh Slavin (1995). Kajian berbentuk kuasi eksperimen ini melibatkan 40 orang responden iaitu 20 orang dalam kumpulan kawalan dan 20 orang dalam kumpulan eksperimen. Soal selidik dan set ujian sebelum dan selepas pelaksanaan teknik Jigsaw II diberikan. Dapatan kajian ini menunjukkan peningkatan yang signifikan bagi prestasi akademik pelajar dalam subjek Sejarah STPM dari Pra ujian ( $t= 52.05$ ,  $p= .003$ ) ke pasca ujian ( $t= 70.45$ ,  $p= .001$ ). Hasil kajian menunjukkan bahawa jika dibandingkan dengan kumpulan kawalan, teknik Jigsaw II dapat meningkatkan prestasi akademik kumpulan eksperimen dengan berkesan dalam memahami konteks subjek sejarah STPM. Selain itu, para pelajar juga bersetuju bahawa penggunaan teknik Jigsaw II membantu memahami konteks subjek sejarah dengan lebih mudah berbanding kaedah tradisional. Aktiviti pembelajaran secara berkumpulan yang melibatkan pergerakan aktif ini sememangnya membantu kepada kefahaman yang lebih baik. Teknik Jigsaw II juga memupuk suasana pembelajaran yang positif dan aktif serta sifat bertanggungjawab menimba ilmu dalam kalangan responden.

Kata kunci: Pembelajaran dan Pemudahcaraan (pdpc), Pembelajaran koperatif, Jigsaw II, Konteks Subjek Sejarah STPM



# **MANAJEMEN PEMBIAYAAN PENDIDIKAN PERUSAHAAN PERTAMBANGAN BATU BARA MELALUI CORPORATE SOCIAL RESPONSIBILITY (CSR) PADA SEKOLAH-SEKOLAH DI KECAMATAN TENGGARONG SEBERANG**

Rahmat Soe'oad, Widyatmike Gede Mulawarman, Tuti Susilawati,  
Program Pascasarjana Manajemen Pendidikan Fakultas Keguruan Dan Ilmu  
Pendidikan Universitas Mulawarman Samarinda

## **ABSTRACT**

This research aims: (1) to describe education financing planning coal mining company through CSR, (2) to describe education financing implementation coal mining company through CSR, (3) to describe education financing controlling coal mining company through CSR, (4) to describe the effectiveness of education financing coal mining company through CSR. This research conducted at PT. Jembayan Muarabara (JMB) which operation area located in Tenggaraong Seberang. The research followed 2 qualitative approach implementing case study as a research method. The research findings show: (1) planning and budgetting in the education sector was good enough, but have not been fully realized; (2) the education program was directly implemented by the CSR team, through the local government, and in collaboration with educational institution, DLHK, and Kutai Karatanegara University; (3) supervision was carried out in simple, transparent and accountable ways by giving the report or evidence in realizing the program; and (4) the effectiveness of the education financing program was not optimal, because there were still several obstacles in its implementation, such as lack of human resources, discrepancies between planning and realization, and lack of participation and coordination between institutions. The researcher concluded that PT. JMB basically paid good attention to education, but it needs improving so that the quality of education in Tenggaraong Seberang is expected to become better.

Keywords: Education Financing Management, Corporate Social Responsibility (CSR)

# MANAGEMENT OF INDONESIAN LANGUAGE LEARNING BASED ON EAST KALIMANTAN FOLKLORE TO FOSTER STUDENT CHARACTER IN PRIMARY SCHOOL

Widyatmike Gede Mulawarman, [widyatmike@fkip.unmul.ac.id](mailto:widyatmike@fkip.unmul.ac.id),

Yusak Hudyono, [yusak.hudyono@fkip.unmul.ac.id](mailto:yusak.hudyono@fkip.unmul.ac.id),

Endang Dwi Sulistyowati, [endang266dwis@gmail.com](mailto:endang266dwis@gmail.com),

Alfian Rokmansyah, [alfian@fkip.unmul.ac.id](mailto:alfian@fkip.unmul.ac.id),

Muhammad Ma'rifannur, [marifannurm@gmail.com](mailto:marifannurm@gmail.com),

Fakultas Keguruan dan Ilmu Pendidikan, Universitas Mulawarman Magister Pendidikan Bahasa dan Sastra Indonesia, FKIP, Universitas Mulawarman

## ABSTRACT

The purpose of this study is to describe the content of local wisdom values in East Kalimantan Folklore that will be implemented on learning tools to foster character education that colors the culture of the behavior of learners in every Indonesian learning activity in the classroom. The research approach used is qualitative descriptive, with data collection techniques through interviews, observations, and documentation studies. Participants of this study were Indonesian Language Educators and Principals trying to program the learning conditions of Bahasa Indonesia based on Kalimantan folklore. Data analysis is done by content analysis technique. The results showed that East Kalimantan Folklore in Indonesian language learning planning outlined in the teaching materials contains character education values that include: (1) religious; (2) honest; (3) hard work; (4) creative; (5) curiosity; (6) the spirit of nationality; (7) appreciate achievements; (8) peace-loving; (9) environmental care; (10) social care; and (11) responsibilities. These values become the basis that folklore in addition to being used as a medium to introduce stories that ancestors believed to their descendants, can also be a means of educating the character in the learner.

Keywords: Language learning management, East Kalimantan folklore, and character education

# CHARACTER EDUCATION THROUGH LEARNING OF LANGUAGE AND LITERATURE USING KUTAI FOLKLORE AYUS AND ONGO

Muhammad Ma'rifannur, [marifannurm@gmail.com](mailto:marifannurm@gmail.com),  
Dr. Hj. Widyatmike GM, M. Hum, [widyatmike@kip.unmul.ac.id](mailto:widyatmike@kip.unmul.ac.id),  
Prof. Dr. Mohammad Siddik, M. Pd, [hmsiddik@yahoo.com](mailto:hmsiddik@yahoo.com),  
Master of Indonesian Language and Literature Education, FKIP, Mulawarman University Faculty of  
Teacher Training and Education, Mulawarman University

## ABSTRACT

This research generally aims to obtain a relatively complete and comprehensive description of character education through language learning through the folklore of Kutai Ayus and Ongo. This research is a qualitative research method with a descriptive design. The results showed that the stories of the people of Kutai Ayus and Ongo consisted of two types, namely legends and fairy tales. The character education values found in the legend are brave, responsible, social care, disciplined, humble, and religious. The values of character education found in fairy tales are clever, patient, obedient, optimistic, hard working, willing to accept defeat, and keeping promises. Based on the 10 stories found, there are 7 stories that are relevant as literature learning materials in schools and there are 3 stories that are not relevant.

Keywords: folklore, character education value, language and literature learning

# **ANALISIS FISIKO-MEKANIKA BATU BATA YANG DIMODIFIKASI DENGAN ABU DAUN BAMBU (BAMBUSEAE SP.)**

Syahrudin Kasim, Abd. Wahid Wahab and Aryl Furqan Aswar

## **ABSTRACT**

A research on the impact of the addition of Bamboo Leaf Ash (BLA) for the physical and chemical properties of clay brick and the analysis on mason-made clay brick from Mattoanging, Mandalle Village, West Bajeng Regency, Gowa has been conducted. Addition of BLA was chosen because of the high amount of Si and also can produce a pozzolanic material that can strenghten a mortar. The research was done by adding BLA to the mixture of clay brick dumpling for 5%, 10% and 20% by weight then preparing a blank and a sample brick from the mason. The research continued with the physical test which are pressure strength test, water absorption test and pseudo-density test then the chemical test that all were done in instrumental fashion that are FTIR, XRD, XRF, and SEM tests. The physical test were then matched with the SNI 15-2094-2000. The result shown that the addition of 5% BLA gave the best result from the physical test with the average pressure strength of 2.2895 MPa, water absorption level of 12.09% and the pseudo-density of 1.505 g/cm<sup>3</sup>, and the chemical test shown that the addition of BLA would increase the amount of major Si element for 63.76% in a sample with 5% BLA addition in the clay brick and can also form pozzolanic material, but the addition of BLA 10% or more didn't strengthen the brick.

Keywords: Bamboo Leaf Ash, Clay Brick, Pozzolan

# **BLENDED LEARNING GAWI SABUMI TO IMPROVE STUDENT'S CRITICAL THINKING, CREATIVE THINKING, ANALYTICAL THINKING AND PROBLEM SOLVING**

Akhmad Riandy Agusta, [riandy.agusta@ulm.ac.id](mailto:riandy.agusta@ulm.ac.id), Pendidikan Guru Sekolah Dasar, FKIP, Universitas Lambung Mangkurat, 70123, Indonesia  
Ahmad Suriansyah, [a.suriansyah@ulm.ac.id](mailto:a.suriansyah@ulm.ac.id), Magister Manajemen Pendidikan, Pascasarjana, Universitas Lambung Mangkurat, 70123, Indonesia

## **ABSTRACT**

The learning process during the COVID-19 pandemic needs a learning model that can improve student's critical thinking, creative thinking, analytical thinking, and problem-solving skills. This research discusses the effectiveness of the blended learning model GAWI SABUMI to improve critical thinking, creative thinking, analytical thinking, and problem-solving skills for elementary school students. This research uses the method of Research and Development with the 4D model (Define, Design, Develop, and Disseminate). The results of the research were analyzed using sequential data analysis to determine the feasibility of the model, to analyze the effectiveness of the model on the dependent variable through the Two-sample t-Test and N gain tests. The research sample is 40 students of Pasar Lama 1 Banjarmasin elementary school. The results show that (1) the steps of the GAWI SABUMI blended learning model include ten stages: Group, Analysis, Work together, Inform, Solve the problem on outdoor, Actualization of the solution, Battle games, Unity on role play, Manage conclusion and Invent the creation with the validation score of 4.82 and a validity percentage of 92.21%, which means that the blended learning GAWI SABUMI is valid, reliable, and feasible to be implemented, (2) the GAWI SABUMI model is able to improve student's skills in the experimental class after six meetings. Students who achieve high criteria in critical thinking are 85%, creative thinking is 80%, analytical thinking is 95% and problem-solving is 95%. Based on the results of this research, it is concluded that the blended learning GAWI SABUMI is feasible to implement and able to improve students' critical thinking skills, creative thinking, analytical thinking, and problem-solving.

Keywords: blended learning, GAWI SABUMI, critical thinking, creative thinking, analytical thinking, problem solving, elementary school

# TEKNIK BISKUT OREO MENYELESAIKAN MASALAH MURID DALAM MENGINGAT DAN MELUKIS FASA-FASA BULAN

Logesvery A/P Muniandy, [logesvery78@gmail.com](mailto:logesvery78@gmail.com), Sjk(T) Taman Tun Aminah

## ABSTRAK

Kajian tindakan ini bertujuan untuk meningkatkan pengingatan peringkat bentuk fasa -fasa bulan dengan penggunaan teknik biskut "Oreo". Sampel kajian terdiri daripada murid -murid Tahun 5 Vaimai SJK(T)Taman Tun Aminah.Terdapat tiga instrumen yang telah diguna pakai bagi mengumpul data iaitu Ujian Sebelum Dan Selepas kajian tindakan, Senarai Semak Temubual serta Borang Soal Selidik. Data kajian dianalisis menggunakan statistik deskriptif seperti kekerapan, min dan peratusan. Didapati bahawa prestasi murid meningkat dengan mendadak selepas kajian tindakan dijalankan di mana berlaku anjakan dari lingkungan gred C ke D ,kepada gred A ke B. Murid menunjukkan hampir dua kali ganda peningkatan dalam pencapaian mereka dengan peningkatan tertinggi sebanyak 80% dan terendah 40%. Murid juga dapat menyebut peringkat bentuk fasa -fasa bulan secara spontan selepas kajian tindakan dijalankan. Respon soal selidik yang positif selepas kajian tindakan menunjukkan bahawa teknik penggunaan biskut "Oreo" dapat memberikan banyak manfaat terutamanya dalam meningkatkan pengingatan dan minat melukis bentuk fasa bulan terhadap sains Tahun 5.

Kata kunci: Peringatan,Peringkat, Sains ,Bentuk Fasa Bulan, Biskut "Oreo"

# **THE OVER USAGE OF SOCIAL MEDIA AND ITS IMPACT ON SELF-ESTEEM AMONG UNIVERSITY STUDENT'S IN PETALING JAYA**

Mohamad Afifi B Yahaya , Sunway Diploma Studies (SDS) Sunway  
Irwan Sukma Sukarman, [irwan@picoms.edu.my](mailto:irwan@picoms.edu.my), Universiti Selangor (UNISEL)  
Ts. Farid Azwan Mohd Yusof , Universiti Selangor (UNISEL)

## **ABSTRACT**

Information technology is a rapidly growing part of today's society. It affects everyone's life in many aspects. Every human endeavor is influenced by information technology and the increasing rate at which what it can perform includes. We live in a time and age where information is just a button press away. We are swayed by information all around us. We millennials want to know, read, understand and then speak our minds about it. That is where social media comes into play. Social media is one of the biggest elements that we live with and cannot ignore it. Social media collection of websites, applications and other platforms that enable us to share or create content and also helps us to participate in social networking. Social media is not limited to blogging and sharing pictures, there are lot of strong tools also that social media provides. That is because that the impact of social media is very high and far reaching. Social media has far reaching impact on the youth, as they are the ones who are most active on social networking sites. There are no doubt both positive and negative aspects but users should use their own discretion on the usage of social media. As a student you must balance everything like studies, sports and social media properly to live a fuller life. Hence, this study was conducted to measure the relationship between the over usage of social media and its impact on self-esteem among university students in Petaling Jaya. A set of questionnaire was set out to distribute among 30 students in the age between 18 to 26 years old in university of Petaling Jaya in. The result of the study illustrated that there is a relationship between the over usage of social media and its impact on self-esteem among university students in Petaling Jaya.

Keywords: Over usage, social media, impact on self-esteem, university students in Petaling Jaya

# **REQUIREMENTS ANALYSIS OF TEACHING MATERIALS FOR KVISOFT FLIIPBOOK MARKER EBOOK AND UTILIZATION OF THE BLOG PLATFOM TO IMPROVE STUDENT CARE ATTITUDE IN RESEARCH IN JUNIOR HIGH SCHOOL (SMP)**

Yuyun Dwi Nurana, [yuyunpuspita82@gmail.com](mailto:yuyunpuspita82@gmail.com) , The University of Mulawarman  
Dr. Vandalita M.M.Rambitan, MP, [vandalitamr@gmail.com](mailto:vandalitamr@gmail.com) , The University of  
Mulawarman  
Prof. Dr. H. Susilo, S.Pd., M.Pd, [olisusunmul@gmail.com](mailto:olisusunmul@gmail.com) , The University of Mulawarman

## **ABSTRACT**

This study aims to analyze the level of needs of students in Junior High School (SMP) for Biology Science teaching materials. This research method uses the development model developed by Borg & Gall. According to Borg and Gall, the research and development (R&D) approach in education includes ten steps. The subjects in this study were seventh grade junior high school students. Based on the results of observations, interviews, and distributing questionnaires, the science textbooks on environmental pollution have been used in the learning process and have been proven to be successful in helping students find information. However, on the other hand, there are several problems that arise from the use of textbooks such as the material presented is still general, only focuses on cognitive aspects, lacks detail, and does not provide active learning activities for students, especially regarding environmental care. This study aims to analyze the needs of students, the books used, and the condition of the class in order to find solutions in the form of developing learning products. The results of the study show that (1) there are problems in using the science package book for environmental pollution as the main source, (2) students need more effective teaching materials that can be taken anywhere and can be opened and opened whenever they are, for example the use of ebook flipbook markers, ( 3) the use of the blog platform can be an alternative strategy for active learning, especially the habituation of caring for the environment.

Keywords: Kvisoft Fliipbook Marker, Blog, Environmental Care Attitude



# **DEVELOPMENT OF NEUROSCIENCE-BASED BIOLOGY LEARNING MEDIA TO INCREASE LEARNING MOTIVATION AND CRITICAL THINKING ABILITY FOR HIGH SCHOOL STUDENTS IN TENGGARONG**

Yuli Rian A. Sinaga, andriyanisinaga19@yahoo.com, Universiti Sains Indonesia  
Didimus Tanah Boleng, didimus.tanahboleng@yahoo.com,Universiti Sains Indonesia

## **ABSTRACT**

Neuroscience-based learning is a field of neuroscience that focuses on studying the concept of education from the perspective of the brain's working system. Teachers and parents still rarely pay attention to this field of study, causing the emergence of a passive and not optimal learning atmosphere in stimulating nerve cells in the human brain. The results of initial observations conducted on 22-28 April 2021 on teachers and high school students in Tenggara (SMA Negeri 1 Tenggara, SMA Negeri 2 Tenggara, SMA Negeri 3 Tenggara) were still (85%) teachers still relied on verbal language, picture/animation media, PowerPoint and only (15%) varied in the use of biology learning media although based on interviews that understood well enough the audio, visual and audio-visual media. Likewise with learning with neuroscience-based media, from the results of interviews generally (85%) did not know biology learning with neuroscience-based media and only a few (15%) knew and implemented it in biology learning. The same thing for students' ability to think critically, from the results of interviews that it was found that students' abilities were generally moderate and low. It was because students assumed that biology was a rote subject and was less motivated when learning. This research method was Research and Development (R&D) Sivasailam Thiagarajan. The prominent purpose of this research development method was to create products and assess the feasibility of products created in the form of neuroscience-based learning videos that are limited to the circulatory system. The research subjects consisted of three validator experts, for instance, media, material, and linguistic experts. Class XI students were divided into two groups: the control group and the experimental group. The outcomes were in the form of neuroscience e-based learning media to increase students' learning motivation and thinking skills on circulatory system material.



# **PARALLEL SESSION (ROOM 5)**

# **KEBERKESANAN KAEDAH PEMBELAJARAN *STAD* BERPANDUKAN MODUL APLIKASI PENDIDIKAN SENI VISUAL TERHADAP PENCAPAIAN DAN SIKAP MURID**

Othaya kumaran Kandasamy, othayausm31@student.usm.my, Universiti Sains Malaysia  
Al-Amin Mydin, alamin@usm.my, Universiti Sains Malaysia  
Abdul Ghani Kanesan, agk@usm.my, Universiti Sains Malaysia

## **ABSTRAK**

Kajian ini bertujuan untuk mengukur keberkesanan kaedah pembelajaran model *STAD* (*Student Team Achievement Division*) berpandukan modul aplikasi Pendidikan Seni Visual terhadap pencapaian dan sikap murid tahun empat di Sekolah Jenis Kebangsaan Tamil (SJKT). Reka bentuk kajian ini mengaplikasikan kaedah kuasi eksperimen dengan membahagikan kepada dua kumpulan iaitu kumpulan eksperimen dan kumpulan kawalan. Kumpulan eksperimen diajar dengan menggunakan kaedah pembelajaran *STAD* berpandukan modul aplikasi Pendidikan Seni Visual Tahun Empat. Manakala kumpulan kawalan diajar dengan menggunakan kaedah konvensional berpandukan buku teks. Kajian ini melibatkan 62 orang murid tahun empat dari dua buah Sekolah Jenis Kebangsaan Tamil di daerah Kulim, negeri Kedah. Kajian ini dijalankan selama lapan minggu. Instrumen yang diguna pakai dalam kajian ini ialah rancangan pengajaran mengikut kaedah pembelajaran model *STAD*, ujian pra, ujian pasca dan soal selidik sikap. Hasil kajian ini dianalisis dengan menggunakan ujian-t tidak bersandar dan ANOVA dua hala. Dapatan kajian ini menunjukkan bahawa kumpulan eksperimen yang diajar dengan menggunakan kaedah pembelajaran *STAD* dapat meningkatkan min skor pencapaian secara signifikan berbanding dengan kumpulan kawalan yang diajar dengan menggunakan kaedah konvensional berpandukan buku teks. Selain itu, sikap murid kumpulan eksperimen terhadap mata pelajaran pendidikan kesenian menunjukkan min skor yang lebih tinggi berbanding dengan kumpulan kawalan. Akhir sekali, kajian ini memberikan implikasi yang jelas terhadap peningkatan pencapaian dan sikap murid tahun empat di SJKT dalam mata pelajaran pendidikan kesenian.

Kata Kunci: Pendidikan Seni Visual; eksperimen; kaedah pembelajaran *STAD*.

# THE USE OF AUGMENTED REALITY (AR) APPLICATION IN ASSISTING STUDENTS TO DRAW 3D ORBITAL DIAGRAMS

Aiza Mufida Mozi\*, Lee Eva  
Kolej Matrikulasi Johor  
Kementerian Pendidikan Malaysia  
Jalan Payamas, 84900  
Johor Darul Ta'zim

## ABSTRACT

This study aims to promote students' independent learning by implementing the use of AR technology in helping students to gain better understanding in Chemistry concept, particularly in the topic of 3D orbital diagrams. The AR app "Molecular Shape 3D" is an interactive mobile app that was developed using UNITY with C# language. It can be found in the Google Play Store and is free to download. The interactive AR application involves scanning the pre-generated QR codes via smartphones and enables students to visualize the 3D orbitals in AR view, understand and successfully draw the accurate 3D orbital diagrams. The analysis was carried out based on the pre- and post-test among pre-university students. Respective sets of pre- and post-test questions were administered to the students. The data was collected and analyzed quantitatively using SPSS version 23 and paired sample t-test was applied. From the analysis, the value of SPSS for cohort 19/20 is  $t(54)=27.071$ ,  $p<0.05$  and for cohort 20/21  $t(55)=28.01$ ,  $p<0.05$ . For both cohorts, a significant effect shown by the students' performances convinces that this AR app is able to assist students to understand better and draw 3D orbital diagrams. A quantitative data was collected using interviews to acquire students' perception on using the AR app in supporting them to draw the 3D orbital diagrams.

Keywords: AR, Molecular shape 3D, orbitals, QR codes

# **IMAGE VISUAL TECHNIQUE IMPROVES MEMORISATION OF AGRARIAN GOVERNMENT FACTS AMONG FORM ONE STUDENTS**

Shapiza Sharif, shapizasharif@yahoo.com, Institute of Teacher Education Malay Language Campus  
(IPG Kampus Bahasa Melayu)

Roslina Suratnu, roslina@ipgkbm.edu.my, IPG Kampus Bahasa Melayu

Haslinda Mohamad Saad, haslinda@ipgkbm.edu.my, IPG Kampus Bahasa Melayu

Nirwana Mohd Rashid, dr.nirwana6617@gmail.com, IPG Kampus Bahasa Melayu

## **ABSTRACT**

History, as a subject, is loaded with facts. This creates an obstacle for students in memorising the facts. This action research was conducted with the purpose of helping to improve fact memorisation of the characteristics of agrarian governments among Form One students. The basis of conceptual frameworks for this action research were based on Kurt Lewin's (1946) and Laidlaw's (1992) models. This study involved a total of six low-performing Form One students in History and one teacher. Preliminary surveys were conducted through observations, interviews, and document analysis. The results of the surveys showed that the students had difficulty memorising facts leading to a lengthy duration of solving questions related to agrarian governments. The findings of this study prove that the visual technique of images facilitates students' fact memorisation of the characteristics of agrarian governments. The adoption of this method creates an easier learning process and can save teachers' time during teaching.

Keywords: Image visual, technique improves memorisation, agrarian government, facts, History subject, form one students

# ENCOURAGE DESIGN STUDIO PARTICIPATION DURING VIRTUAL CRIT SESSIONS USING THE MIRO TOOL

Siti Rahmah Omar, [siti.rahmah@utm.my](mailto:siti.rahmah@utm.my), Universiti Teknologi Malaysia

## ABSTRACT

As a vital part of all design practice, the design studio required a series of design critique sessions and participation. Previous studies highlight that the face-to-face format is significantly more conducive to student-lecturer and student-student interaction. Due to the covid-19 pandemic situation and restricted movement control order, large studio meeting which usually held weekly for a critique session and face-to-face discussion with better non-verbal understanding is no longer possible. Thus, the whole creative process is required remotely without face-to-face meetings, and nonetheless, students need to improve their design communication verbally and visually. Since students are not in a room together, it is harder to stay focused, which leads to low engagement and a lack of organisation. This work reports on the use of Miro online collaborative whiteboards during basic design studio for landscape architecture students in Universiti Teknologi Malaysia (UTM), Skudai Johor. The multi-user display allows every student to be able to contribute directly with lively interaction and good visuals. It allows the lecturer to identify everyone present, keep everyone engaged, and facilitate dialogue during the studio design meeting. Real-time collaboration enables the class to gather, referring to the specific drawing on the board and bring them to the lecturer whereabouts. It helps lecturers make sure that every student is where they want them to be focused on during the virtual discussion, and this improves the remote design critique process and outcome. Miro boards become their living documentation, and crit session is possible among their peers as well as accessible even in odd hours. Therefore, using Miro as a tool did encourage the student to participate actively during virtual crit sessions, which was then depicted at the end of the project submission through the improvement of drawing output and the final overall course learning outcome.

## PROMOTING PUPILS' SPEAKING FLUENCY AND SOCIAL COLLABORATION THROUGH *TOONTASTIC 3D*

William Mark Joseph Raj, williamjosephraj72@gmail.com, PPD Kuala Muda Yan

### ABSTRACT

The research was conducted to show how *Toontastic 3D* promotes fluency in speaking as well as to bind the pupils in a strong social collaboration among primary school pupils. *Toontastic 3D* is a game which is executed only for pleasure but with a purpose controlled by the teacher. According to Google (2015), with *Toontastic 3D*, children can draw, animate and narrate their own adventures, new stories, school reports and anything else they might dream of. It is like a digital puppet theatre but with enormous interactive 3D worlds, dozens of customizable characters, 3D drawing tools and an idea lab with sample stories to inspire new creations. The research addressed two research questions – the effect of *Toontastic 3D* on pupils' speaking fluency and the effect of *Toontastic 3D* in pupils' social collaboration. The data for the research was obtained through qualitative research methods, namely classroom observations, survey and interviews with five pupils. The data collection techniques used during the observations were written field notes and audio and video recording. The study took place in one Year Four English Language classroom with 37 pupils. The observations took place for a period of four weeks.

Keywords: *Toontastic 3D*, speaking, fluency, collaboration,

# **'SMART-A' IN IMPROVING HISTORICAL THINKING SKILLS AMONG FORM 4 STUDENTS**

Chandramathi Kanesan, chandramathi9341@gmail.com, University Science of Malaysia

## **ABSTRACT**

This research aims to investigate the effect of using SMART-A on historical thinking skills. SMART-A is a form of e-learning tool designed in Edmodo platform. SMART-A was developed in accordance with the principles of cognitive theory of multimedia learning. Teacher enables to share content, distribute quizzes, assignments and manage to communicate with students, colleagues and parents. The multimedia materials in SMART-A consists of audios, videos and graphics. The focus of the study in SMART-A is on Chapter 2 of the History Form 4: The Rise of Nationalism. 60 form 4 students from two secondary schools in Kedah were the respondents. Experimental group students were exposed to learn history via SMART-A, while control group learned via interactive power point presentation. This study used an embedded experimental design which involves both quantitative and qualitative methods. Additionally, interview was conducted aimed at viewing student's acceptance of SMART-A as a tool to generate historical thinking skills. Data obtained were analysed by ANOVA. Data from the interview analysis using Atlas.ti 8 shows that the acceptance of students using SMART-A were very high. Historical thinking skills are more evident among students using SMART-A compared to interactive power point presentation. In line with the latest technology advances and innovations, SMART-A works effectively in enhancing students' historical thinking skills.

Key words: SMART-A, historical thinking skills, multimedia learning



# **THE CHALLENGES FACED BY THE LECTURERS IN TECHNOLOGY INTEGRATION AT HLI IN THE MALDIVES: A SYSTEMATIC LITERATURE REVIEW**

Mohamed Imran, mohamed.imran@ium.edu.mv

## **ABSTRACT**

This study reports on the key challenges faced by the lecturers at HLI in integrating technology by conducting a SLR based on the publication in the context of the Maldives. For the purpose of this study, several publications related to technology integration have been reviewed. Google Scholar has been used to find the articles published between 2000 to 2020 on the subject. More than 50 articles have been traced by using search phrases such as: lecturers' technology integration in Maldives, use of ICT by lecturers in Maldives and challenges faced in using ICT in HLI in Maldives. Out of these articles, 10 most relevant articles have been selected considering the timeframe and relevancy. Two major themes emerge from these articles. Initially it is found that lecturers' lack proper training such as professional development programs for effective use of technology in classrooms. Secondly, the HLI lack supportive conditions and a conducive culture in particular the relationship among the colleagues to facilitate to a better use of technology in classrooms.

**Key Words:** Technology integration in the Maldives, use of ICT by lecturers in Maldives, challenges of using ICT in HLI in Maldives

# **THE OVER USAGE OF SOCIAL MEDIA AND ITS IMPACT ON SELF-ESTEEM AMONG UNIVERSITY STUDENT'S IN PETALING JAYA**

Irwan Sukma Sukarman, irwan@picoms.edu.my Universiti Selangor (UNISEL),  
Ts. Farid Azwan Mohd Yusof, Universiti Selangor (UNISEL),  
Mohamad Afifi B Yahaya, Sunway Diploma Studies (SDS) Sunway

## **ABSTRACT**

Information technology is a rapidly growing part of today's society. It affects everyone's life in many aspects. Every human endeavor is influenced by information technology and the increasing rate at which what it can perform includes. We live in a time and age where information is just a button press away. We are swayed by information all around us. We millennials want to know, read, understand and then speak our minds about it. That is where social media comes into play. Social media is one of the biggest elements that we live with and cannot ignore it. Social media is collection of websites, applications and other platforms that enable us to share or create content and also helps us to participate in social networking. Social media is not limited to blogging and sharing pictures, there are lot of strong tools also that social media provides. That is because that the impact of social media is very high and far reaching. Social media has far reaching impact on the youth, as they are the ones who are most active on social networking sites. There are no doubt both positive and negative aspects but users should use their own discretion on the usage of social media. As a student you must balance everything like studies, sports and social media properly to live a fuller life. Hence, this study was conducted to measure the relationship between the over usage of social media and its impact on self-esteem among university students in Petaling Jaya. A set of questionnaire was set out to distribute among 30 students in the age between 18 to 26 years old in university of Petaling Jaya in. The result of the study illustrated that there is a relationship between the over usage of social media and its impact on self-esteem among university students in Petaling Jaya.

Keywords: Over usage, social media, impact on self-esteem, university students in Petaling Jaya

# **CAUSAL ATTRIBUTION FOR SUCCESS AND FAILURE IN MATHEMATICS AMONG SECONDARY SCHOOL STUDENTS: CASE STUDY IN TERENGGANU**

Husnizaaina binti Abdul Manan,  
Faculty of Informatics & Computing,  
Universiti Sultan Zainal Abidin, 21300 Kuala Terengganu.

## **ABSTRACT**

Mathematics is one of the core subjects and achievements in those subjects are always of concern. The aim of this study is to evaluate the perceptions of daily secondary school students toward the main causal attribution factors underlying students' success and failure in Mathematics. The data was collected randomly from 126 form four students daily secondary school in Terengganu through a distribution of questionnaire. A questionnaire consists of 35 items comprising with four causal attribution factors for success and failures such as ability, effort, task difficulty and learning environment based on the Weiner Attribution Theory. The research found that the learning environment (teachers) appears to be the main causal attribution factor of success in Mathematics among daily secondary school students. Meanwhile, effort is the main causal attribution factor student failure in Mathematics followed by task, ability and learning environment. With regards to the success factor, no significant differences exist for all factors between the two groups of students. For the failure attribute, low achiever students agree that the ability factor influenced their failure in Mathematics. Therefore, this study can be an important guide to teachers, schools and parents to improve the quality of student-centered learning in school.

Keywords: Weiner Attribution Theory, secondary school students, Mathematics achievement

# KESAHAN DAN KEBOLEHPERCAYAAN INSTRUMEN PENGURUSAN KERJA RUMAH MENGGUNAKAN ANALISIS FAKTOR KONFIRMATORI

Madina Abdul Rahman, madina81@student.usm.my, Universiti Sains Malaysia  
Ahmad Zamri Khairani, ahmadzamri@usm.my, Universiti Sains Malaysia

## ABSTRAK

Pengurusan kerja rumah merupakan aspek yang penting kerana ia merupakan sebahagian daripada proses regulasi sendiri murid dalam mengatur persekitaran, mengurus masa, mengendali gangguan, memantau motivasi dan mengawal emosi sewaktu menyelesaikan kerja rumah. Walau bagaimanapun, kajian berkaitan pengurusan kerja rumah ini masih kurang dijalankan di negara kita. Justeru, kajian ini dijalankan bagi mengkaji kesahan dan kebolehppercayaan Instrumen Pengurusan Kerja Rumah agar lebih banyak kajian dapat dijalankan bagi memahami isu berkaitan pengurusan kerja rumah ini. Seramai 100 orang murid tingkatan empat terlibat dalam kajian ini yang dipilih menggunakan pensampelan bertujuan. Data dianalisis menggunakan kerangka analisis faktor konfirmatori (CFA) menggunakan perisian SmartPLS 3.0. Dapatan mengesahkan bahawa Instrumen Pengurusan Kerja Rumah mengukur pengurusan kerja rumah dari aspek lima dimensi, iaitu mengatur persekitaran, mengurus masa, mengendali gangguan, memantau motivasi dan mengawal emosi. Setiap dimensi menunjukkan bukti kesahan menumpu yang tinggi (muatan faktor antara 0.70 – 0.87, nilai purata varians yang diakstrak 0.50 – 0.61, nilai kebolehppercayaan komposit 0.81 – 0.86 dan nilai pekali alpha 0.70 – 0.80). Selain daripada itu, pengukuran yang dibuat menggunakan instrumen tersebut juga menunjukkan bukti kesahan diskriminan yang tinggi berdasarkan nilai HTMT di antara 0.23 dan 0.64. Oleh itu, dapatlah disimpulkan bahawa Instrumen Pengurusan Kerja Rumah sesuai digunakan di Malaysia bagi mendapatkan maklumat berkaitan pengurusan kerja rumah dalam kalangan murid sekolah.

Kata kunci: Pengurusan kerja rumah, analisis faktor konfirmatori, kesahan menumpu, kesahan diskriminan.

# **AMALAN KEPIMPINAN TRANSFORMASI GURU BESAR TERHADAP KOMITMEN ORGANISASI SEKOLAH TRANSFORMASI (TS25) NEGERI PULAU PINANG**

Muhammad Akmal Ngadiman, [akmalngadimanonline@gmail.com](mailto:akmalngadimanonline@gmail.com), Universiti Sains Malaysia  
Aziah Ismail, [aziah@usm.my](mailto:aziah@usm.my), Universiti Sains Malaysia

## **ABSTRAK**

Komitmen organisasi merupakan perkara yang penting dalam meningkatkan kejayaan sesebuah sekolah. Untuk menggapai kejayaan tersebut, aspek kepimpinan transformasi merupakan elemen yang penting untuk diaplikasikan oleh pemimpin sekolah dalam membantu memastikan kejayaan sesebuah sekolah tersebut. Justeru itu, kajian ini bertujuan untuk mengenal pasti tahap kepimpinan transformasi guru besar dan komitmen organisasi di sekolah transformasi TS25 negeri Pulau Pinang, mengenal pasti perbezaan kepimpinan transformasi guru besar dan komitmen organisasi berdasarkan jantina serta mengenalpasti peramal yang signifikan dimensi kepimpinan transformasi guru besar terhadap komitmen organisasi. Kajian ini menggunakan kaedah tinjauan dengan menggunakan soal selidik. Seramai 552 orang responden dikalangan guru-guru yang berkhidmat di sekolah transformasi (TS25) negeri Pulau Pinang telah menjawab soal selidik ini. Dapatan kajian mendapati tahap kepimpinan transformasi guru besar dan komitmen organisasi berada pada tahap yang tinggi. Dapatan juga menemukan tidak terdapat perbezaan yang signifikan kepimpinan transformasi guru besar dan komitmen organisasi berdasarkan jantina serta terdapat peramal yang signifikan dimensi kepimpinan transformasi guru besar terhadap komitmen organisasi. Kesimpulan kajian ini menyarankan bahawa kepimpinan transformasi wajar diamalkan oleh pemimpin sekolah untuk meningkatkan komitmen organisasi yang menjurus kepada kejayaan sesebuah sekolah.

Kata Kunci: Kepimpinan Transformasi, Komitmen Organisasi

# **TEACHERS' SATISFACTION IN USING SCHOOL RESOURCE CENTER AT THE SECONDARY SCHOOLS IN NORTHERN REGION OF MALAYSIA**

Nor Azlina Azmi, nor.azlina.azmi@gmail.com, Universiti Sains Malaysia  
Al-Amin Mydin, alamin@usm.my, Universiti Sains Malaysia

## **ABSTRACT**

In an attempt of Malaysia to become an education hub as compared to developing countries and particularly to meet the new demands from the teachers of Education 4.0, Malaysia government has set up various preparations to fulfil the aspiration. One of the government's initiatives for support the aspiration is to establish information provider which is School Resource Center. Today, most schools have School Resource Centers that plays a critical role in school curriculum and participate in the development of lifelong learners. However, the level of School Resource Center usage among teachers are still low even though the concept of School Resource Centers is equipped with well-stocked materials and resources and is administered by trained library and media teacher to ensure that the School Resource Center meet the satisfaction level of the users. This shows that the School Resource Center is still not given emphasis in ensuring teachers' satisfaction in using School Resource Center resources and services. Hence, the aim of this study is to delve the level of teachers' satisfaction in using School Resource Center resources and services at the secondary schools in Northern Region of Malaysia. This study employs the mixed-method approach, specifically an explanatory design that uses a combination of quantitative and qualitative methods. A total of 375 secondary schools' teachers will be involved and the instrument for this study consist of 36 School Resource Center satisfaction statements and are grouped into 3 broad areas: (1) School Resource Center services, (2) School Resource Center place/space, and (3) School Resource Center collection/information. The statement was adapted from Norliya (2009) and Kiran (2010). For face validity, the number of 11 expert panels has been involved which consists of academicians in library science field, Library and Media Teachers and a translator.

**Keywords:** School resource center, satisfaction, library and media teacher

# INTEGRATION OF STEM BEST PRACTICE IN PRIMARY MATHEMATICS EDUCATION

Cheetalakchumy Balu, Balu Manikam, Uma Balu, Shanthini Balu, Shivabalan Thiruchelvam  
STEM Educators  
cheetalakchumy@gmail.com

## ABSTRACT

This action research is conducted to improve remedial pupils' skill on addition involving regrouping with the "BP & PB" technique with mastery in place value concept correctly. This research is conducted on six primary school students from one of the primary school. It involves four male and two female students who are at the weak level of proficiency. "BP & PB" technique is a method involving place value chart that contains a distribution box to write the sum and to add the numbers in the place based on color. The data collection methods used were pre test and post test, students worksheet, observation, and interviews. The data collected analyzed using both qualitative and quantitative methods. Based on findings from the data collected, this "BP & PB" technique can improve students' mastery on addition skills involving regrouping. Students responses that indicate this "BP & PB" technique is easy to understand. This method can also increase the confidence level of students to answer addition questions that involves regrouping. Research participants showed positive improvement towards the use of "BP & PB" technique while answering questions in the form of mathematical sentences. The proposed follow-up to this research are teaching aids for "BP & PB" technique that could be used in topics such as subtraction and multiplication involving regrouping. In conclusion, this research motivate myself to continue to carry out more researches in finding appropriate methods to help remedial students recover and then return to the premier class and at the same time reduce the number of students with problem in 4M.

Keywords: addition, regrouping, place value, BP & PB method

# **KEBERKESANAN KAEDAH BP & PB BAGI MENINGKATKAN KEMAHIRAN MENAMBAH DENGAN MENGUMPUL SEMULA DALAM KALANGAN MURID PEMULIHAN**

Cheetalakchumy Balu, Balu Manikam, Uma Balu  
cheetalakchumy@gmail.com

## **ABSTRAK**

Penyelidikan tindakan ini dijalankan untuk meningkatkan kemahiran murid pemulihan dalam penambahan melibatkan pengumpulan semula melalui Kaedah BP & PB. Kajian ini dijalankan ke atas enam orang murid pemulihan di sebuah sekolah di daerah Hulu Perak, Perak. Kajian ini melibatkan empat orang lelaki dan dua orang perempuan yang mempunyai tahap pencapaian yang lemah. Kaedah BP & PB merupakan satu kaedah yang melibatkan carta nilai tempat yang mengandungi kotak agihan bagi menulis hasil tambah dan seterusnya menambah nombor mengikut nilai tempatnya berdasarkan warna. Cara pengumpulan data yang digunakan adalah ujian pra dan pasca, lembaran kerja murid, pemerhatian dan temu bual. Data yang dikumpul dianalisis secara kualitatif dan kuantitatif. Dapatan kajian mendapati bahawa Kaedah BP & PB mampu meningkatkan penguasaan murid dalam penambahan yang melibatkan pengumpulan semula. Murid juga memberi respon bahawa Kaedah BP & PB merupakan satu kaedah yang mudah difahami. Kaedah ini juga dapat meningkatkan keyakinan murid untuk menjawab soalan-soalan tambah dengan mengumpul semula. Peserta penyelidikan menunjukkan perubahan positif terhadap penggunaan Kaedah BP & PB semasa menjawab soalan tambah dalam bentuk ayat matematik. Cadangan tindakan susulan bagi penyelidikan ini ialah bahan bantu mengajar iaitu carta Kaedah BP & PB dapat digunakan dalam topik tolak dan darab yang melibatkan pengumpulan semula. Kesimpulannya, penyelidikan ini memberikan motivasi kepada diri saya untuk terus melaksanakan penyelidikan dalam mencari kaedah yang sesuai untuk membantu murid pemulihan dan kemudian dapat kembali ke arus perdana sekaligus mengurangkan bilangan murid bermasalah 4M.

Kata kunci: tambah, mengumpul semula, nilai tempat, kaedah BP & PB



## REENGINEERING #CORRECTCODE TO RECONSTRUCT FUNCTIONAL FIXEDNESS

<sup>1</sup>Titiyaka binti Jajuri, titiyakajajuri@yahoo.com, Universiti Sains Malaysia.

<sup>2</sup> Shahabuddin bin Hashim, shah@usm.my, Universiti Sains Malaysia.

<sup>3</sup>Nor Asniza binti Ishak, asnizaishak@usm.my, Universiti Sains Malaysia.

<sup>4</sup>Naeim Nazherah binti Ahmad Ahmadbm,-1524@moe-dl.edu.my, Kolej Matrikulasi Perak.

### ABSTRACT

Functional fixedness is a type of cognitive bias that involves a tendency to see objects as only working in a particular way. The studies reported that functional fixedness is just one type of mental obstacle that can make problem-solving more difficult. However, five fingers tips #correctcode is a systematic structured way of functional fixedness that act as a mental shortcut allowing student to quickly and efficiently determine a practical use for answering problem solving questions. The aim of this study is to present an overview of #correctcode to reconstruct Functional Fixedness that provides important tools and possible changes that teachers can apply to facilitate students in problem solving strategy for Physics Education. As seen from the literature review, problem solving strategy for almost university student and high school Physics Education related to the factors such as problem type, characteristics of problem solvers, their knowledge of the field, conceptual knowledge and metacognitive features. Along with that, five fingers tips #correctcode has been pointed out as a fastes route and simple guidelines that follow the steps of extract the information of the questions, write suitable equations, solve the problem accordingly, answer with unit and recheck to reconstruct funtional fixedness. In most of researches' results were presented related with determination of students' ability on general problem solving strategies sub-steps and teaching of cognitive awareness strategies is required to be a good problem solver (Elif ince,2018). According to this classification, as problem solving strategies, they usually follow the steps of understanding the problem, determining the concepts, making the plan, solving the problem, and evaluation of the outcome that is always inline with the problem solving theory and cognitive learning theory. This presentation is not only enriches the research literature but also has important significance for problem solving in physics education theory and practice; give a clear picture to understand the problem-solving strategies of educators for the preparation of future researches.

Key words: Functional fixedness, problem solving strategy, Physics Educatio

# LAB ON POINT: A VIRTUAL GUIDE FOR PHYSICS EXPERIMENT OUTSIDE THE LABORATORY

Naeim Nazherah Ahmad, bm-1524@moe-dl.edu.my, Kolej Matrikulasi Perak  
Shahabuddin Hashim, shah@usm.my, Universiti Sains Malaysia  
Nor Asniza Ishak, asnizaishak@usm.my, Universiti Sains Malaysia  
Titiyaka Jajuri, titiyakajajuri@yahoo.com, Universiti Sains Malaysia

## ABSTRACT

During the pandemic, students need to attend the class online including laboratory work. Unable to attend the lab session and the lack of resources and monitoring feedback makes students unable to recreate the experiment and may lead to huge errors to the experimental data. This will make student's lack in science process skills. "Lab On Point" is a virtual laboratory manual that is developed as a tool to monitor and guide for students activity in conducting the Physics laboratory experiment, Simple Harmonic Motion (SHM), in the Matriculation syllabus. The purpose of "Lab On Point" is to help students to create and conduct the experiment with correct procedure, producing and reporting the result that satisfied the objectives of the experiment. Therefore, it helps to increase the accuracy of data experiment and to reduce error while conducting the experiment. The findings obtained shows that through the use of Lab On Point, the accuracy of the experimental data is high at 97.83% and the percentage of error is small at 2.17%. This manual can be an alternative way to monitor student's experiment activity, bring the laboratory experience remotely accessible and encourage the role of student self-navigator learner. In conclusion, hopefully this manual can be improved into friendly user *apps*, covering various Physics experiment-based topics and available to be used by other institutions with the same Physics syllabus as matriculation. Finally, this manual is able to help promote a better learning process to make the experiment can be carried out anywhere, everywhere without being tied to the physical laboratory.

Key words: Virtual Laboratory Manual, science process skills, self -navigator learner, Physics Education.

## **MATA PELAJARAN SEJARAH: KREATIVITI DAN KEMAHIRAN PEMIKIRAN SEJARAH (KPS)**

Suhaida Binti Mohd Sahid, suhaidamsahid@gmail.com, Universiti Sains Malaysia  
Shahabuddin Bin Hashim, shah@usm.my, Universiti Sains Malaysia

### **ABSTRAK**

Mata pelajaran Sejarah merupakan subjek wajib lulus dalam Sijil Pelajaran Malaysia (SPM), bermula pada tahun 2013 dan pada tahun 2014 pula mata pelajaran Sejarah diperkenalkan diperingkat sekolah rendah mengikut Kurikulum Standard Sekolah Rendah atau KSSR sudah tentu memperlihatkan kepada umum bahawa mata pelajaran ini sangat penting kepada rakyat negara ini. Sungguhpun begitu, mata pelajaran Sejarah merupakan subjek yang kurang digemari oleh murid kerana ianya memerlukan murid membaca dan mengingat fakta yang banyak dan menyebabkan murid-murid terasa terbeban serta bosan semasa belajar sejarah. Justeru, tanggungjawab paling berat tergalas pada bahu guru-guru Sejarah. Guru perlu jadi lebih kreatif dalam kaedah penyampaian kandungan agar murid tidak bosan tetapi sebaliknya teruja untuk mempelajari Sejarah. Mata pelajaran Sejarah mempunyai struktur disiplin yang sangat sistematik bagi mengembangkan proses pengajaran dan pembelajaran agar lebih efektif dan dinamik. Murid diajar memahami ciri-ciri sejarah supaya dapat meningkatkan kemahiran pemikiran dengan lebih kritis dan analitis. Kemahiran ini dipupuk dan diaplikasikan oleh murid dengan pelbagai kemahiran seperti kemahiran kronologi, kemahiran meneroka bukti, kemahiran interpretasi, kemahiran imaginasi dan kemahiran merasionalisasi. Kaedah pengajaran seorang guru amatlah penting untuk menarik minat murid dalam sesuatu topik yang diajar. Oleh itu, seseorang guru perlulah kreatif dan memperbaharui kaedah pengajaran yang sedia ada. Hal ini kerana kreativiti guru sangat penting dalam meningkatkan kefahaman dan penghayatan murid terhadap sejarah (Siti Zubaidah, Abdul Razak Ahmad, 2015). Seiring dengan kemajuan yang berlaku pada hari ini yang telah banyak mengubah dunia, pendidikan juga perlu turut serta melakukan inovasi seiring dengan kemajuan teknologi yang telah berlaku pada hari ini bagi membolehkan proses pengajaran dan pembelajaran lebih menarik minat murid. Kesimpulannya, mata pelajaran Sejarah perlulah diajar mengikut peredaran masa. Oleh yang demikian para guru perlulah berani mencuba dan lebih kreatif dalam melaksanakan Kemahiran Pemikiran Sejarah (KPS) agar penguasaan kemahiran ini akan memberi kesan besar kepada corak pemikiran murid dan juga tingkah laku murid selaras dengan falsafah dan hala tuju pendidikan negara. Penyelidikan pada masa hadapan amat perlu untuk memberikan pendedahan kepada guru abad ke-21 supaya lebih kreatif dan proaktif dalam pengajaran mata pelajaran Sejarah dengan melengkapkan diri supaya lebih menggunakan teknologi terkini terutamanya dalam melaksanakan Kemahiran Pemikiran Sejarah (KPS) kepada murid-murid.

Kata kunci: Mata pelajaran Sejarah, Kreativiti, Kemahiran Pemikiran Sejarah (KPS)

# CABARAN GURU MENGGUNAKAN ICT DALAM PENGAJARAN DAN PEMBELAJARAN PENDIDIKAN MORAL DI SEKOLAH MENENGAH

Salmiza binti Mohd Sahid, salmizasahid@student.usm.my, Universiti Sains Malaysia.  
Shahabuddin bin Hashim, shah@usm.my, Universiti Sains Malaysia.

## ABSTRAK

Penggunaan Teknologi Maklumat dan Komunikasi atau *Information and Communication Technology (ICT)* dalam pengajaran adalah pendekatan terkini yang diketengahkan oleh Kementerian Pendidikan Malaysia supaya suasana pengajaran dan pembelajaran di bilik darjah menjadi lebih seronok dan memberi kesan yang baik kepada pelajar. Penggunaan ICT dalam pengajaran dan pembelajaran bagi Mata Pelajaran Pendidikan Moral adalah cara dapat mengatasi masalah pengajaran dan pembelajaran. Hal ini kerana penggunaan ICT sangat penting dalam melaksanakan pembelajaran abad ke-21. Pelbagai strategi yang boleh guru gunakan apabila melakukan sesi pengajaran dengan menggunakan ICT seperti persembahan elektronik, video, gambar dan permainan. Penggunaan ICT juga menyokong pendekatan konstruktivisme, di mana pelajar menggunakan teknologi untuk meneroka dan meningkatkan kefahaman dan penguasaan pelajar terhadap setiap topik yang dipelajari. Namun masih terdapat guru yang kurang menggunakan ICT dalam pengajaran mereka. Kebanyakan guru mempunyai tahap kemahiran teknologi yang sederhana dan juga kurang pendedahan untuk penggunaan perisian yang baharu. Biasanya masalah kemahiran penggunaan ICT ini berlaku kepada guru lama (veteran). Bagi guru baru mereka telah didedahkan dengan pengetahuan kemahiran ICT semasa mengikuti kursus perguruan di institusi masing-masing. Selain itu, sikap terhadap ICT dalam kalangan guru iaitu sikap tidak mahu mengubah diri untuk melakukan perubahan. Hanya apabila mereka yakin bahawa idea-idea dalam inovasi baru telah terbukti dapat meningkatkan keberkesanan dalam pengajaran mereka barulah mereka bersedia untuk mengubah cara kerja mereka. Seterusnya, masalah kemudahan dan kebolehcapaian ICT di sekolah yang berada di kawasan luar bandar dan kekurangan komputer serta perisian yang menyebabkan kebolehcapaian terhadap ICT semakin terbatas. Oleh itu, Kementerian Pendidikan Malaysia perlu mengambil langkah efektif dalam menerapkan penggunaan ICT secara maksimum dalam kalangan guru. Penyelidikan masa hadapan perlu memberikan pendedahan secara terperinci bagi mengatasi cabaran yang dihadapi dalam menggunakan ICT dalam pengajaran Pendidikan Moral di sekolah menengah supaya matlamat penggunaan ICT dalam pengajaran dapat dicapai dengan baik.

Kata kunci: Cabaran guru, Penggunaan ICT, Pendidikan Moral

# **THE EFFECTIVENESS OF TARSIA PUZZLE IN ENHANCING VOCABULARY ACQUISITION AND WRITING SKILLS**

Unaizah Abdul Mutalib, iezah.unaizah@gmail.com, Universiti Sains Malaysia

## **ABSTRACT**

This research investigated the effectiveness of Tarsia puzzle in enhancing vocabulary acquisition and writing skills among Year 5 primary school students. A mixed-methods design was utilized in this study. The quantitative phase, which employed a quasi-experimental design, was conducted prior to the qualitative phase. Sixty-four students (N = 64) from two primary schools in a southwest district in Penang participated in this study. There were 32 students each in the control and experimental groups. The students in the experimental group received Tarsia puzzle as a treatment, while students in the control group experienced traditional teaching. There were eight teaching and learning sessions covering eight topics throughout the treatment period. The vocabulary and writing pretests and posttests, were analysed using paired samples T-test. The findings revealed that the Tarsia puzzle was effective in improving students' vocabulary acquisition and writing skills. The qualitative phase involved three focus group interviews with 12 students who showed the highest, average, and low improvement performance from the posttests. The interview data were analysed thematically and disclosed students' positive experiences playing the Tarsia puzzle game in class. They were also reported to be motivated, gaining confidence, enhance critical and creative thinking skills, improve speaking skills and grammar. Tarsia puzzle was proven to be an excellent tool in conducting fun and active learning. The findings have implications for the vocabulary and writing instructions in primary school ESL classrooms.

Keywords: Tarsia puzzle, vocabulary, writing, Primary schools, ESL

# AMALAN KAEDAH PENTAKSIRAN BILIK DARJAH KURIKULUM PENDIDIKAN ISLAM

Norfarahin binti Mohd Zamri, farahinmohdzamri@gmail.com  
Mohd Isa bin Hamzah, isa\_hamzah@ukm.edu.my, Universiti Kebangsaan Malaysia  
Shahlan bin Surat, drshahlan@ukm.edu.my, Universiti Kebangsaan Malaysia

## ABSTRAK

Perubahan pendidikan dalam aspek pentaksiran dilaksanakan agar bersesuaian dengan matlamat pendidikan terkini. Konteks kajian berfokus kepada perubahan pelaksanaan pentaksiran dalam Pengajaran dan Pembelajaran (PdP) Tahap 1 (Tahun 1, 2 dan 3) sekolah rendah berdasarkan pemansuhan peperiksaan pada tahun 2019 kepada Pentaksiran Bilik Darjah (PBD) kurikulum Pendidikan Islam KSSR (Semakan 2017). PBD merupakan salah satu pentaksiran di bawah komponen akademik. Kajian ini melibatkan 350 orang guru Pendidikan Islam yang mengajar murid Tahap 1 di Negeri Selangor dengan menggunakan borang soal selidik sebagai instrumen kajian. Antara tujuan dilaksanakan adalah untuk mengenalpasti kaedah pentaksiran yang dilaksanakan oleh guru Pendidikan Islam dalam pelaksanaan PBD seiring dengan pemansuhan amalan peperiksaan pertengahan tahun dan akhir tahun bagi murid Tahap I di semua sekolah rendah Kementerian Pendidikan Malaysia (KPM) bermula pada tahun 2019. Dapatan kajian menunjukkan bahawa kaedah yang paling tinggi digunakan ialah kaedah pemerhatian ( $M= 4.13$ ,  $SP= 0.707$ ), kedua ialah kaedah bertulis ( $M= 4.12$ ,  $SP= 0.704$ ), kaedah gabungan ( $M= 4.12$ ,  $SP= 0.698$ ) manakala kaedah yang paling rendah dilaksanakan ialah kaedah lisan ( $M= 4.09$ ,  $SP= 0.694$ ). Kajian ini menunjukkan guru Pendidikan Islam mengamalkan kesemua kaedah PBD yang disarankan oleh KPM berada pada tahap yang tinggi. Kesemua kaedah dilaksanakan oleh guru Pendidikan Islam agar dapat menghasilkan pelaksanaan PBD yang berkesan ke arah keberhasilan murid selaras dengan sasaran Pelan Pembangunan Pendidikan Malaysia (PPPM) 2013 – 2025.

**Kata kunci:** kaedah pelaksanaan pentaksiran bilik darjah, pentaksiran bilik darjah, perubahan pendidikan, kurikulum pendidikan islam

# **FACTORS OF ENTREPRENEURSHIP MOTIVATION FACTORS (MF), ENTREPRENEURSHIP EDUCATION EXPOSURE (EE) AND ENTREPRENEURSHIP ENVIRONMENT FACTORS (EF) TOWARDS ENTREPRENEURSHIP TENDENCY : A COMPARATIVE STUDY**

Irwan Sukma Sukarman, irwan@picoms.edu.my, Universiti Selangor (UNISEL),  
Ts. Farid Azwan Mohd Yusof, Universiti Selangor (UNISEL),  
Mohamad Afifi B Yahaya, Sunway College Kuala Lumpur

## **ABSTRACT**

Entrepreneurship is regarded as one of the key development initiatives, which leads to employment and economic growth; therefore, reducing poverty and inequality. Besides providing support to existing entrepreneurs, over the recent years, policy makers have focused on entrepreneurial education to cope with graduate unemployment issues and to foster economic growth. This research was conducted to study the entrepreneurship tendency of students from PICOMS and City U. There were three major factors of entrepreneurship tendency dimension was analysed Exposure of entrepreneurship education (EE), Motivation Factors (MF) and Environmental Factor (EF). This study adopted a cross-sectional design and a quantitative approach, and collected complete data of 133 students from PICOMS International University College (n= 77) and City University (n = 76). The students were randomly selected or voluntarily agree to become as a respondent. The Questionnaires which was built by Nur Hidayati et.al.(2017) were used as the main instrument to collect data and the data obtained was analysed statistically using SPSS Statistical Package for Social Science (SPSS version 21.0).. The results show that the tendency of entrepreneurship as a whole is moderate positive, the results show Exposure of entrepreneurship education (EE) (2.94) has higher mean than student motivation (2.79) and Environmental Factor (EF) (2.62) to the students. In conclusion, the education policy makers and the higher learning institutions in Malaysia should therefore emphasize on programs and curriculums to improve the students' ability to recognize income-generating opportunities, entrepreneurial training and skills, innovativeness and information-seeking competencies, which are expected to reduce the rate of unemployed graduates and foster the economic development in Malaysia.

Keywords: Entrepreneurship, Entrepreneurship tendency, students, Private Education College/Universities

# **IMPLEMENTATION OF INQUIRY METHOD AS AN ALTERNATIVE STRATEGY OF SCIENCE LEARNING IN PANDEMIC AREA FOR ELEMENTARY STUDENT**

Tika Puspita Widya Rini, Rina Rusiyana  
Faculty of Teacher Training and Education Lambung Mangkurat University [tika.rini@ulm.ac.id](mailto:tika.rini@ulm.ac.id)

## **ABSTRACT**

In this study the results of interviews with class teachers about the methods used during this pandemic. The method used is the inquiry method that is carried out online through the whatshapp group, the aim is to improve the quality of class V students of SDN Balida, Paringin District, Balangan Regency in 2019/2020 during the pandemic. The subject of research is the fifth grade students of SDN Balida, with data sources of the fifth grade teachers of SDN Balida. Data collection techniques through interviews. The conclusion of this research is that the application of the Inquiry method can improve the quality of student learning during a pandemic. Achievement of improving the quality of student learning reaches 75%.

Keywords: Inquiry method, science learning, online learning



# **THE IMPACT OF USING DIGITAL SHORT STORIES ON EFL COLLEGE STUDENTS' PRONUNCIATION MASTERY**

Taif Ibrahim AL-Kinany taif.alkinany@nct.edu.om  
Ph.D student at the School of Educational Studies/USM

## **ABSTRACT**

This work tests the effectiveness of exposing EFL college students to digital short stories to improve their production of English segmental pronunciation. The methodology of the research used was quasi experimental pre-posttests design with two Omani EFL college students' sessions actively of the treatment in which they were virtually exposed to seven digital short stories in which total exposure was approximately of 350 minutes. Digital short stories were applied to experimental class and textbook material of sentence-repetition practice was used in the control class. The findings reveal that applying digital short stories as a pedagogy assisted the EFL students to develop their overall pronunciation skill specifically at the segmental level. The results also indicate that students of the experimental group developed their pronunciation of the consonant clusters, diphthongs and triphthongs with an acceptable level of pronunciation mastery. The conclusion of the research recommends that short stories could be used as authentic material to develop EFL learners' segmental pronunciation skill at both the recognition and production levels.

Key words: digital short story, pronunciation mastery, training material

# **LEARNING MODEL GIVING TO IMPROVE STUDENT'S ACTIVITY, MOTIVATION AND LEARNING OUTCOME ON ELEMENTARY SCHOOL**

Noorhapizah, Elfa Anisa Putri

Magister Pendidikan Guru Pendidikan Anak Usia Dini, Pascasarjana Universitas Lambung Mangkurat,  
70123, Indonesia

Pendidikan Guru Sekolah Dasar, FKIP, Universitas Lambung Mangkurat, 70123, Indonesia

Correspondence: noorhapizah@ulm.ac.id, fhanissaputri1710@gmail.com, Tel. +62 896- 0360-4216

## **ABSTRACT**

The purpose of this research is to determine the increase in student activity, motivation, and learning outcomes after participating in learning using the GIVING (Group Investigation, Visual activity, Intellectually the solution, Negotiation and Games) model. This study uses a mix method consisting of qualitative with classroom action research and quantitative using one sample t-test and N-gain analysis conducted in 4 meetings. The object of the research was the 9 persons of fourth grade students of Pekauman 1 elementary school Banjarmasin. Research data obtained through observations of teacher activities, student activities, individual evaluation tests and questionnaires. Data analysis uses descriptive analysis and cross tabulation analysis techniques described by tables, graphs and interpretations with percentages. The results show that at the last meeting the implementation of learning obtained score of 35 with very good criteria. Students who get the very active criteria in student activities reach the percentage of 100%. Students who get very high criteria on learning motivation reach the percentage of 100%. Students who get scores above the minimum completeness criteria on learning outcomes reach the percentage 100%.

**Keywords:** Learning Activities, Learning Motivation, Learning Outcome, Learning Model GIVING

# **EFFECT OF PLANT-BASED PESTICIDES MIXED KERSEN LEAF EXTRACT (MUNTINGIA CALABURA L.) AND BETEL LEAF (PIPER BETLE L.) AGAINST THE INTENSITY OF PEST ATTACKS ON SWEET POTATO PLANTS (IPOMOEA BATATAS L.)**

Khairunnisa, chaaa43@gmail.com, the University of Mulawarman  
Sonja V.T Lumowa, verasonja@yahoo.com, the University of Mulawarman

## **ABSTRACT**

This research is a true experiment which aims to determine the effect of applying a mixture of plant-based pesticides with cherry leaf extract (*Muntingia calabura* L.) and betel leaf extract (*Piper betle* L.) to reduce the intensity of pest attacks on sweet potato (*Ipomoea batatas* L.). The population in this study were all sweet potato plants in Samarinda Ilir Village, while the research sample used was 125 sweet potato plants which were divided into five treatment levels, water (control), 25% mixed extract, 50% mixed extract, 75% mixed extract, and 100% mixed extract, with 5 repetitions. Data were analyzed by ANOVA test. From the analysis results show the value of  $F_{count} (4.19) > F_{table} (3.006)$  so it can be concluded that the application of plant-based pesticides mixed with cherry leaf extract (*Muntingia calabura* L.) and betel leaf extract (*Piper betle* L.) can reduce the intensity of pest attacks on plants sweet potato (*Ipomoea batatas* L.)

Keywords: Plant-based Pesticide, Pest Attack, *Muntingia calabura* L, *Piper betle* L, *Ipomoea batatas* L

# **THE DIFFERENCES OF STUDENT LEARNING RESULT BETWEEN STUDY QUICK ON THE DRAW (QD) WITH SCRAMBLE TOWARD BIOLOGY ACHIEVEMENT TO THE SECOND GRADE STUDENTS OF SMPN 1 SAMARINDA**

Eka Fitria Purnamasari, ekafitriaps@gmail.com, the University of Mulawarman  
Makrina Tindangen, makrin\_tindangen@yahoo.co.id, the University of Mulawarman  
Elsje Theodora Maasawet, emaaawet@gmail.com, the University of Mulawarman

## **ABSTRACT**

This study is a quasi-experiment that aims to determine the differences in students' learning outcomes on the subject of Plant Body Function Structure and Photosynthesis between the Quick On The Draw (QD) learning model and scramble learning model. The population in this study was all grade VIII students of SMP Negeri 1 Samarinda in the 2012/2013 School Year which amounted to 11 classes. While the samples used are class VIII-G (QD learning model) and class VIII-H (Scramble learning model) each amounted to 22 students. The data was analyzed using t. The results showed that the average value of improved student learning outcomes with both learning models differed markedly ( $p < 0.05$ ). The QD learning model resulted in an average increase in student learning outcomes higher than scramble learning model, which was 84.4 compared to 75.15. The Quick On The Draw (QD) learning model is more recommended for use in Biology science learning than scramble learning models.

Keywords: Quick On The Draw (QD), Scramble, Results of Study of Biological Sciences

# KEBERKESANAN KAEDAH 5 BY 5 SPEED DALAM MENINGKATKAN KEFAHAMAN PELAJAR TERHADAP CADANGAN PEMBAIKAN SELEPAS DIAGNOSIS TRANSMISI AUTOMATIK 4 KELAJUAN.

Mohammad Hazrul Bin Md Jori, [hazruljori@gmail.com](mailto:hazruljori@gmail.com), Kolej Vokasional Taiping

## ABSTRAK

Pendemik COVID-19 telah memberi cabaran baru pada guru-guru untuk mempelbagaikan inovasi pengajaran dan pembelajaran demi memastikan pelajar tidak ketinggalan walaupun hanya berada di rumah. Bagi pengajaran dan pembelajaran amali, inovasi sangat penting untuk memberi kefahaman kepada pelajar kerana ia banyak melibatkan amalan praktikal yang perlu dilaksanakan secara *hand-on*. Justeru itu, kajian tindakan ini dijalankan bagi meningkatkan kefahaman pelajar terhadap cadangan pembaikan selepas diagnostik transmisi automatik 4 kelajuan dengan menggunakan kaedah 5 by 5 speed. Inovasi yang digunakan dalam kajian ini merupakan kaedah intervensi yang dilaksanakan bagi memudahkan pelajar yang berkebolehan rendah mengenalpasti kedudukan klac dalam kotak transmisi dan juga memudahkan pelajar memahami bagaimana klac beroperasi menghasilkan pergerakan serta kelajuan. Kaedah 5 by 5 speed adalah gambarajah kotak mempunyai 5 sisi iaitu 5 X 5 dan terdiri daripada *speed* (kelajuan) dan *clutches & brakes* (klac dan brake). Untuk menguji kebekesanan kaedah 5 by 5 Speed ini, dua kaedah digunakan iaitu kuiz praktikal 2 (ulangan) dan juga soal selidik (maklum balas pelajar). Rekabentuk kajian ini merupakan kajian tindakan yang melibatkan seramai 12 orang pelajar untuk diberi bimbingan melalui kaedah intervensi ini. Secara keseluruhannya menunjukkan intervensi kaedah 5 by 5 speed ini berjaya kerana terdapat perubahan selepas intervensi ini dilaksanakan. Walaubagaimanapun intervensi ini masih perlu lagi penambahbaikan memandangkan kompetensi unit ini memerlukan kehadiran pelajar untuk melaksanakan kerja amali bagi penyelenggaraan dan pemeriksaan setiap klac yang terlibat.

# **PROGRAM EFFECTIVENESS: MEASURING BOOK CLUB READING PROGRAM IN AN ISLAND SCHOOL**

Mohamed Fayaz

## **ABSTRACT**

The online book club is designed to motivate and engage the students in reading in their free time and improve their literacy skill and reading fluency. Students who participate in reading program should make greater gains in reading skills than students of similar ability who do not take part in the program. The purpose of this study is to investigate the student's motivation level and engagement in reading after participating in the reading club. At the same time this study intends to identify the effectiveness of the program and hence to bring the required changes to program based on the findings. A survey is conducted to collect the data required in answering the research questions of this study. A randomly selected 20 students currently in the club took part in this study. And 10 students who is not a member of the club is also selected. The findings of this are reported by using descriptive statistics including percentages. The findings of this study revealed students were motivated to read and engaged in reading through this program. They were more engaged in reading than ever before this program. However, the findings of this study indicated that students of higher grades and lower grades participation are less or almost nil compared to the middle school students. This study indicated that the students were motivated and engaged in reading when their reading achievement is recognized through a badge or any type of recognition. However, there are some other issues that need to be found out why the senior students and lower primary students are not participating in the program.

Keywords: Free reading, Reading club, reading for joy

# **TUAN GURU HAJI HAMZAH BIN MAMAT (1931-2017): SUMBANGAN TERHADAP PENDIDIKAN ISLAM DI NEGARA BRUNEI DARUSSALAM**

Nazirul Mubin bin Ahad, [nazahad.bn@gmail.com](mailto:nazahad.bn@gmail.com)

## **ABSTRAK**

Kertas kerja ini menyingkap riwayat hidup seorang tokoh berjasa iaitu Tuan Guru Haji Hamzah bin Mamat (1931-2017), yang ketika hayatnya telah memberi sumbangan yang besar terhadap pendidikan Islam di Negara Brunei Darussalam. Fokus kajian tertumpu kepada periwayatan hidup; bermula daripada pendidikan awal sehinggalah ke peringkat tertinggi, seterusnya ketika berkhidmat sebagai seorang pendidik. Maklumat kajian telah diperolehi melalui sumber bacaan yang terhad, temubual yang dijalankan, serta beberapa catatan peribadi. Melihat kepada sumbangan beliau di dalam dunia pendidikan, beliau berpengalaman luas dan mencurahkan bakti begitu lama demi mendidik masyarakat Brunei; bermula daripada peringkat sekolah rendah sehinggalah ke peringkat tertinggi. Dalam mendidik masyarakat, beliau telah diamanahkan untuk menjawat beberapa jawatan sebagai guru besar dan guru agama di sekolah-sekolah agama hampir di keempat-empat daerah, serta menjadi pensyarah khususnya di Maktab Perguruan Agama Seri Begawan dan Institut Pengajian Islam. Beliau tekun berkhidmat di Brunei Darussalam sehingga kepulangan beliau ke tanah air beliau pada tahun 1997, iaitu genap 33 tahun berada di bumi Darussalam. Sepanjang tempoh ini, beliau merupakan guru yang dihormati di dalam pelbagai bidang agama, khususnya bidang al-Qur'an. Diharapkan kajian ini akan menjadi kayu pengukur, dapat dilaraskan dan dikembangkan lagi di dalam sudut lain khususnya berkaitan sumbangan beliau, yang bukan hanya terhad di dalam dunia pendidikan, tetapi mencakupi pelbagai ruang lingkup.

Kata kunci: Al-Qur'an, Pendidikan Islam, Maktab Perguruan Agama Seri Begawan.



**PARALLEL  
SESSION  
(ROOM 6)**



# KEPIMPINAN INSTRUKSIONAL GURU BESAR DENGAN KUALITI KEHIDUPAN KERJA GURU SEKOLAH JENIS KEBANGSAAN TAMIL

Anpalakan Vadiappan, *anpalakan@student.usm.my*, Universiti Sains Malaysia  
Al Amin Mydin, *alamin@usm.my*, Universiti Sains Malaysia  
Abdul Jalil Ali, *jalil@usm.my*, Universiti Sains Malaysia

## ABSTRACT

Kajian ini adalah kajian kuantitatif jenis tinjauan. Penyelidik menggunakan borang *Google* untuk mengumpul maklumat kajian menerusi *Principal Instructional Management Rating Scale (PIMRS) teachers' short form* dan soal selidik Kualiti Kehidupan Kerja Guru. Responden kajian ini terdiri daripada 125 orang guru Sekolah Jenis Kebangsaan Tamil terpilih negeri Kedah Darul Aman. Data kajian dianalisis menerusi *Statistical Package for Social Sciences (SPSS)* versi 27. Dapatan kajian menunjukkan bahawa kepimpinan instruksional guru besar dan kualiti kehidupan kerja guru berada pada tahap tinggi. Seterusnya, ujian-t sampel bebas mendedahkan bahawa tidak terdapat perbezaan min dalam penerimaan amalan kepimpinan instruksional guru besar berdasarkan jantina guru. Manakala, kualiti kehidupan kerja guru menunjukkan ada perbezaan dalam min antara guru-guru berlokasi bandar dan luar bandar. Ujian ANOVA sehalu menunjukkan wujud perbezaan dalam kualiti kehidupan kerja berdasarkan umur guru. Akhirnya, ujian Korelasi *Pearson* turut mendedahkan bahawa terdapat hubungan yang kuat dan positif antara amalan kepimpinan instruksional guru besar dengan kualiti kehidupan kerja guru di Sekolah Jenis Kebangsaan (Tamil).

Kata kunci: Kepimpinan instruksional, kualiti kehidupan kerja guru, Sekolah Jenis Kebangsaan Tamil

# **FUNGSI KEPIMPINAN SITUASI DALAM KONTEKS PENDIDIKAN SEMASA PANDEMIK COVID-19 DI MALAYSIA**

Tengku Nurshahrulnizam Osman, tengkushah@student.usm.my, Universiti Sains Malaysia  
Al Amin Mydin, alamin@usm.my, Universiti Sains Malaysia

## **ABSTRAK**

Dunia globalisasi pada abad ke-21 ini telah membawa banyak perubahan terhadap sistem pendidikan sehingga beberapa tindakan penambahbaikan dilaksanakan. Penekanan terhadap sektor pendidikan merupakan satu keperluan agar tenaga kerja yang dihasilkan melalui sistem pendidikan negara dapat memenuhi keperluan pasaran pekerjaan berteraskan Revolusi Industri 4.0. Cabaran paling getir kepada pemimpin pendidikan seperti pengetua atau guru besar pada masa kini telah melanda dunia termasuk Malaysia sendiri iaitu pandemik Corona Virus Disease 2019 (COVID-19) di mana mereka terpaksa bertungkus lumus mempersiapkan kepimpinan mereka dengan rencah yang betul agar seiring dengan keadaan semasa dan dunia teknologi. Artikel ini memfokuskan kepada fungsi kepimpinan situasi dalam konteks pendidikan semasa pandemik COVID-19 di Malaysia. Kepimpinan situasi bermaksud suatu proses di mana pemimpin itu sendiri boleh memimpin dengan cara mempengaruhi aktiviti atau kumpulan supaya dapat mencapai visi, misi dan matlamat sesuatu tugas dengan jayanya mengikut situasi yang bersesuaian. Kepimpinan situasi ini telah diilhamkan oleh Henry dan Blanchard (1988) dalam satu model gaya kepimpinan berdasarkan dua kriteria penting yang ditekankan iaitu stail kepimpinan dan kematangan pengikut. Stail kepimpinan terbahagi kepada empat komponen iaitu mengarah, membimbing, menyokong dan mendelegasi. Kematangan pengikut pula dibahagikan kepada dua dimensi iaitu kematangan kerja atau tugas dan kematangan psikologi. Oleh hal yang demikian, artikel ini dilaksanakan bagi melihat fungsi kepimpinan situasi dalam konteks pendidikan yang dianggap sebagai kepimpinan yang fleksibel dalam memikul tugas dan tanggungjawab yang sangat mencabar pada era dunia dilanda virus yang digeruni iaitu COVID-19.

Kata kunci : kepimpinan situasi, pandemik COVID-19

# **KESAN AMALAN KEJELASAN GURU TERHADAP PELIBATAN DAN PENCAPAIAN PELAJAR DALAM PELAKSANAAN KAPASITI PEDAGOGI PEMBELAJARAN BERMAKNA**

Abdul Hadi Mat Dawi, PhD, [hadi06-154@epembelajaran.edu.my](mailto:hadi06-154@epembelajaran.edu.my), Institut Pendidikan Guru Kampus Ipoh  
Zulkufli Mahayudin, [06-18@epembelajaran.edu.my](mailto:06-18@epembelajaran.edu.my), Institut Pendidikan Guru Kampus Ipoh  
Kartini Abdul Mutalib, PhD, [kartini@epembelajaran.edu.my](mailto:kartini@epembelajaran.edu.my), Institut Pendidikan Guru Kampus Sultan Abdul Halim  
Jurina Ibrahim, [jurina05-56@epembelajaran.edu.my](mailto:jurina05-56@epembelajaran.edu.my), Institut Pendidikan Guru Kampus Tuanku Bainun  
Razila Aw Kamaluddin, PhD, [razila@epembelajaran.edu.my](mailto:razila@epembelajaran.edu.my), Institut Pendidikan Guru Malaysia

## **ABSTRAK**

Merungkai standard untuk kejelasan guru merupakan salah satu langkah dalam pelaksanaan inisiatif Kapasiti Pedagogi Pembelajaran Bermakna (KPPB). Sehubungan itu, kajian ini bertujuan mengkaji kesan amalan kejelasan guru terhadap pelibatan dan pencapaian pelajar dalam pelaksanaan KPPB. Kajian ini menggunakan reka bentuk kaedah gabungan urutan penjelasan iaitu dimulakan dengan pendekatan kajian kuantitatif dan kemudiannya diikuti dengan kajian kualitatif (Creswell, 2012). Subjek kajian terdiri daripada 4 orang guru Matematik dan 120 orang pelajar di Sekolah Kebangsaan Pakatan Jaya, Ipoh, Perak. Data-data kajian dikumpulkan menggunakan Borang Senarai Semak Kendiri Kejelasan Guru, Borang "Time On Task", Soalan Latihan, dan Tembu bual. Data-data kuantitatif dikumpul melalui kaedah tinjauan deskriptif. Data-data kualitatif daripada sebahagian subjek kajian dikumpul dan dibuat transkripsi. Dapatan kajian menunjukkan pola amalan kejelasan guru yang tidak konsisten di sepanjang peringkat proses pengajaran dan pembelajaran. Kejelasan guru hanya berlaku pada peringkat mendapatkan kejelasan dan berkongsi kejelasan iaitu pada peringkat awal proses pengajaran dan pembelajaran. Dapatan kajian juga menunjukkan kejelasan guru mempunyai kesan positif terhadap tahap pelibatan pelajar dalam aktiviti pembelajaran dan dalam meningkatkan pencapaian pelajar dalam pembelajaran. Kejelasan guru membolehkan pelajar mempunyai hala tuju yang jelas dalam pembelajaran mereka bagi mencapai pembelajaran bermakna. Kajian ini mencadangkan supaya kejelasan guru dilaksanakan dengan lebih meluas dalam aktiviti pengajaran dan pembelajaran.

Kata Kunci : Kapasiti Pedagogi, Kejelasan Guru, Merungkai Standard, Pelibatan Pelajar, Pembelajaran Bermakna

# KESAN PENGGUNAAN E-MODUL KE ATAS SIKAP PELAJAR EKONOMI TINGKATAN ENAM

Thana Letchumi A/P P. Thirraja, lavania\_tvt@yahoo.com, Universiti Pendidikan Sultan Idris  
Khoo Yin Yin, khoo@fpe.upsi.edu.my, Universiti Pendidikan Sultan Idris  
Zainizam Bin Zakariya, zainizam@fpe.upsi.edu.my. Universiti Pendidikan Sultan Idris

## ABSTRAK

Laporan World Economic 2019 menekankan sistem pendidikan sebagai aspek yang paling berpengaruh dan penting dalam mewujudkan nilai dan norma yang positif dalam kalangan masyarakat untuk berinteraksi. Kepelbagaian kaedah dalam pembelajaran dan pemudahcaraan (PdPc) menjadi satu platform dalam mewujudkan sikap pelajar yang positif yang menjadi aset penting dalam pembangunan dan kemajuan negara selaras dengan matlamat Kementerian Pendidikan Malaysia. Dalam memenuhi keperluan tersebut, maka e-modul diaplikasikan ke atas pelajar. E-modul merupakan satu bentuk modul melalui web percuma yang dibangunkan melalui perisian Padlets. Kandungan e- modul terdiri daripada bahan nota, video, koleksi soalan tahun-tahun lepas dan kemudahan berkomen. Maka, kertas ini bertujuan untuk meninjau kesan sikap pelajar khususnya pelajar ekonomi tingkatan enam menggunakan e-modul. Seramai 116 orang pelajar dari Kolej Tingkatan Enam Perak dipilih sebagai responden dalam kajian ini. Satu set soal selidik digunakan sebagai instrumen kajian berdasarkan skala likert. Perisian "Statistical Packages For Social Sciences" (SPSS) versi 23 digunakan untuk menganalisis data bagi mendapatkan min dan peratus data. Kajian rintis telah dijalankan terhadap 53 orang pelajar untuk menguji kebolehpercayaan instrumen kajian. Nilai pekali kebolehpercayaan bagi kajian ini adalah 0.7 dengan menggunakan kaedah Cronbach Alpha. Secara keseluruhannya tinjauan terhadap sikap pelajar terhadap penggunaan e-modul dalam pembelajaran dan pemudahcaraan di Kolej Tingkatan Enam di Perak berada pada tahap sederhana. Justeru itu, pihak Kolej Tingkatan Enam perlu mengambil inisiatif bagi meningkatkan kesedaran pelajar terhadap kepentingan menggunakan e-modul dalam melestarikan e-pembelajaran.

Kata kunci: Kesan, e-modul, sikap, pelajar ekonomi Tingkatan Enam

# KUALITI KEHIDUPAN KERJA GURU DAN KESANNYA TERHADAP KEINGINAN UNTUK BERPINDAH

Samihah binti Sufi, [samihahsufi@gmail.com](mailto:samihahsufi@gmail.com), Universiti Sains Malaysia  
Al Amin Mydin, [alamin@usm.my](mailto:alamin@usm.my), Universiti Sains Malaysia

## ABSTRAK

Keinginan untuk berpindah dalam kalangan pekerja adalah perkara penting yang memerlukan perhatian dalam organisasi. Pekerja malah sebahagian besar pendidik di negara-negara maju cenderung meninggalkan organisasi apabila tidak dapat berhadapan dengan cabaran semasa. Kadar perpindahan yang tinggi dalam kalangan pekerja mempunyai pengaruh negatif terhadap organisasi dan ia boleh menjejaskan kecekapan, produktiviti dan prestasi pekerja dan organisasi keseluruhannya. Fenomena dunia tanpa sempadan dan kemajuan teknologi kini mempunyai pengaruh terhadap persekitaran dan sistem pendidikan di seluruh dunia yang mana ia menjadi lebih kompetitif. Usaha untuk mengekalkan guru yang berkelayakan dan berpengalaman bukan sahaja menyediakan program pendidikan yang sesuai tetapi juga membantu mengurangkan kos dan menangani perkara yang berkaitan dengan perpindahan guru yang tinggi. Impak globalisasi yang merangkumi aspek ekonomi, politik, budaya dan teknologi berkait rapat dengan kualiti kehidupan seseorang individu. Kualiti kehidupan kerja turut mempengaruhi tanggungjawab sosial. Ini kerana kualiti kehidupan kerja dapat meningkatkan kehidupan keluarga juga kehidupan kerja individu. Kualiti kehidupan kerja guru dilihat sebagai keupayaan organisasi yang dapat membina dan memenuhi keperluan guru serta mempengaruhi tingkah laku dan reaksi pekerja termasuklah niat untuk berhenti kerja. Kualiti kerja, amalan pengurusan dan budaya, dan persekitaran tempat kerja adalah komponen utama dalam menentukan kesihatan, kesejahteraan dan kepuasan pekerja dengan kehidupan kerja mereka. Pemboleh ubah ini penting untuk dikaji kerana ia mempengaruhi keinginan guru untuk berhenti. Kualiti kehidupan kerja menjadi suatu isu penting untuk mencapai matlamat organisasi sama ada dalam sektor perkhidmatan, pembuatan, pendidikan, pelancongan, perbankan dan lain-lain. kertas konsep ini bertujuan untuk membincangkan kajian lepas berkenaan hubungan kualiti kehidupan kerja guru dengan keinginan untuk berpindah dalam kalangan guru-guru sekolah menengah di Zon Utara. Konsep ini dirangka berdasarkan tiga teori iaitu Teori pertukaran sosial (*Social Exchange Theory*), Teori Keperluan Maslow dan Teori ERG (*Existance, Relatedness, Growth*). Kertas konsep ini memfokuskan dan meninjau kajian literatur mengenai hubungan kualiti kehidupan kerja guru dengan keinginan untuk berpindah. Kesimpulannya, kajian ini mencadangkan agar pengetua haruslah cekap dalam seimbangkan di antara kehidupan dan kerja bagi meningkatkan prestasi guru mengikut kesesuaian sekolah dan keperluan situasi.

Kata Kunci: Kualiti Kehidupan Guru, Keinginan untuk Berpindah

# **PEMBANGUNAN MODUL PEMBELAJARAN STEM TENAGA NUKLEAR BAGI MATA PELAJARAN SAINS TINGKATAN EMPAT**

Suraya Mohamed Sabri, surayasabri79@gmail.com, Universiti Pendidikan Sultan Idris  
Dr. Siti Rahaimah Ali, sitirahaimah@gmail.com, Universiti Pendidikan Sultan Idris  
Dr. Izazol Idris, izazol@fpm.upsi.edu.my, Universiti Pendidikan Sultan Idris

## **ABSTRAK**

Pendidikan tenaga nuklear dalam bidang Sains, Teknologi, Kejuruteraan dan Matematik (STEM) merupakan agenda penting dalam Pelan Pembangunan Pendidikan Malaysia (PPPM) 2013 – 2025 bagi memenuhi aspirasi negara dan kehendak dunia global. Peranan guru penting dalam pengajaran dan pembelajaran tenaga nuklear supaya objektif pelajaran tercapai. Kajian ini ialah kajian analisis keperluan bagi mengenal pasti keperluan membangunkan modul pembelajaran STEM bagi topik tenaga nuklear kepada pelajar - pelajar tingkatan empat. Pembelajaran topik tenaga nuklear dianggap topik yang sukar untuk difahami kerana ianya tidak boleh dilihat, dirasai atau dihidu. Guru yang mempunyai pengetahuan terhad mengenai tenaga nuklear juga menyumbang kepada miskonsepsi pengetahuan pelajar. Kajian ini dilakukan secara kuantitatif menggunakan instrumen soal selidik. Sampel kajian dipilih secara rawak melibatkan 110 orang guru Sains tingkatan empat di daerah Klang. Data dianalisis secara deskriptif untuk mencari kekerapan dan peratus. Dapatan kajian menunjukkan terdapat keperluan bagi penyelidik membangunkan modul pembelajaran STEM tenaga nuklear. Dapatan kajian juga menunjukkan strategi pembelajaran iaitu mencari maklumat di internet, membuat poster dan menganalisis video perlu dipertimbangkan dalam membangunkan modul ini. Oleh itu, diharap pembangunan modul ini dapat membantu guru dalam penambahbaikan proses pengajaran dan pembelajaran topik tenaga nuklear.

Kata kunci : Modul pembelajaran, STEM, Sains, tenaga nuklear

# **PENGARUH KEPIMPINAN TRANSFORMASIONAL PENGETUA WANITA TERHADAP KUALITI KEHIDUPAN KERJA GURU GENERASI Y DI SEKOLAH MENENGAH**

Lee Keng Hong, [lkh9128@yahoo.com](mailto:lkh9128@yahoo.com), SMK JIT SIN II  
Al Amin Mydin [alamin@usm.my](mailto:alamin@usm.my), Universiti Sains Malaysia

## **ABSTRAK**

Tujuan kajian ini adalah untuk mengenalpasti amalan kepimpinan transformasional pengetua Wanita dan kualiti kehidupan kerja guru generasi Y serta Pengaruh Kepimpinan Pengetua Wanita (KTP) terhadap Kualiti Kehidupan Kerja Guru Generasi Y (KKKG) di sekolah menengah kebangsaan harian. Pendekatan kuantitatif bersama reka bentuk tinjauan telah digunakan dalam kajian ini. Kesemua data yang diperoleh dianalisis dengan menggunakan prisian SPSS (Statistical Package for the Social Science) versi 26. Kajian ini menggunakan soal selidik sebagai instrumen kajian untuk mengumpul data. Soal selidik terdiri daripada 48 item di mana ianya dibahagikan kepada tiga bahagian. Bahagian pertama terdiri daripada profil demografi responden yang mengandungi 8 item. Bahagian kedua adalah pernyataan berkaitan Kepimpinan Transformasional Pengetua Wanita yang mengandungi 20 item dari instrumen Multifactor Leadership Questionnaire (MLQ) Form 5X-Short. Bahagian ketiga adalah pernyataan berkaitan dengan Kualiti kehidupan Kerja Guru Generasi Y yang mengandungi 20 item dari instrumen yang dibina oleh Nordin Abd Razak, Lei Mee Thien (2017). Sampel kajian adalah terdiri daripada 200 orang guru dari sekolah menengah kebangsaan harian satu sesi yang dipilih secara rawak daripada 4 buah sekolah di bawah pimpinan pengetua Wanita di Daerah Seberang Perai Selatan, Pulau Pinang, Malaysia. Semua data yang diperoleh telah dianalisis dengan menggunakan statistik deskriptif, ujian t dan prosedur analisis regresi linear mudah. Analisis skor min menunjukkan semua amalan Kepimpinan Transformasional Pengetua Wanita (KTP) berada pada tahap yang tinggi dengan nilai min ( $M=3.70$ ;  $SP= 0.91$ ). manakala Kualiti Kehidupan Kerja Guru Generasi Y (KKKG) di sekolah kajian berada pada tahap sederhana tinggi dengan nilai min ( $M=3.34$ ;  $SP= 0.47$ ). Analisis ujian t menunjukkan tidak terdapat perbezaan yang signifikan tahap kualiti kehidupan kerja guru generasi Y mengikut gender. Analisis regresi menunjukkan semua dimensi iaitu Pengaruh ideal, Motivasi Berinspirasi, Stimulasi Intelek dan Pertimbangan secara Individu mempunyai pengaruh sederhana kuat yang signifikan terhadap terhadap semua dimensi kualiti kehidupan kerja guru generasi Y. Hasil dapatan kajian juga menunjukkan Kepimpinan Transformasional Pengetua Wanita (KTP) ( $\beta = 0.56$  .  $p < 0.05$ ) mempunyai pengaruh yang sederhana kuat dan positif terhadap Kualiti Kehidupan Kerja Guru Generasi Y (KKKG) di Sekolah Menengah.

# **TRUSTWORTHINESS IN QUALITATIVE RESEARCH**

Siti Soraya Lin Abdullah Kamal  
School of Distance Education, Universiti Sains Malaysia, 11800 USM, Penang.  
sorayalin@usm.my

## **ABSTRACT**

Qualitative research is often wedded with the interpretive or constructivist paradigm. In this sense, the researcher needs to be self-reflective about their position in the study and how the findings are interpreted and how the researcher's past experience and knowledge, as well as culture and values, could influence the interpretation of the findings. Therefore, the trustworthiness of research is paramount because all research involves generating valid and reliable knowledge in an ethical manner. Researchers have suggested different ways to judge the quality of qualitative studies. This paper will discuss four elements of trustworthiness recommended by Guba & Lincoln (1981) namely credibility, transferability, dependability, and confirmability.



## **BRIDGE TESTING APPARATUS (BRIDGTEST)**

Noor Hazwani Binti Sapuan, bm-1364@moe-dl.edu.my, Kolej Matrikulasi Johor  
Farha Binti Mohamed Yasin, bm-1364@moe-dl.edu.my, Kolej Matrikulasi Johor  
Mohd Yusri Bin Yusop, bm-1364@moe-dl.edu.my, Kolej Matrikulasi Johor  
Zulkiflie Bin A Wahab, bm-1322@moe-dl.edu.my, Kolej Matrikulasi Johor

### **ABSTRACT**

Bridge testing apparatus or Bridgtest is an innovative design of a conventional tester which is used to evaluate bridge strength during bridge building competition. From our observation and interviews with users, it is found that conventional tester has some deficiencies in term of inaccuracy in testing of bridge strength, quality of material used, size and a large number of weight needed to test the bridge. This study aims to create an improved version of tester which is more strong, durable and more importantly it enhances the accuracy of bridge testing procedure. A product test-run and survey were done which involved 100 respondents to collect information on Bridgtest usability, value and also user's perception towards the product. As the result of the innovation, the Bridgtest is able to test 135 kg of the maximum load sustained by the bridge at failure. It also reduces the manufacturing cost and easy to maintain. Our findings show the respondents give a positive feedback on our innovation in term of its usability, practicality and value. This shows that our innovation improves the bridge testing procedure and gives highly satisfaction to the participants. In conclusion, Bridgtest is a perfect equipment to be used as the bridge tester for bridge bulding competition as it benefited both participants and event organizer.

Keywords: Bridge tester, Bridgtest

# **AN EXPLORATORY STUDY: IS AGILITY RELEVANT AMONG TEACHERS?**

Lim Yi Shern, seanlimys@gmail.com, Universiti Sains Malaysia

## **ABSTRACT**

In successfully transforming the Malaysia's education system, the final wave in the roadmap of Malaysian Education Blueprint (MEB) 2013-2025 should be properly executed. The focus on operational flexibility in the system calls for better autonomy, skills, and practices among its main workforce: teachers. With the exhaustive list of e-services, added with managerial and administrative tasks, being agile seems to be the key pillar to deal with changes and challenges out of classroom teaching. However, the scarcity of literature on workforce agility among teachers may indicate that it is paid less attention to, compared to their pedagogical practice. Thus, this exploratory study has attempted to promote workforce agility among teachers of government-aided secondary schools by investigating its relationship with digital competency, employee empowerment, and knowledge sharing practice. One novelty of this study is the use of DigComp 2.1 framework in the empirical testing. Further, with no definite underpinning theory, workforce agility has been explored from the perspective of motivation, using the Self-Determination Theory (SDT). The quantitative data collected from 217 respondents using purposive was analysed using disjoint 2-stage approach in PLS-SEM. Results revealed that the three exogenous variables are significant in promoting workforce agility, having explained 55.5% variance in the endogenous variable. Drawing upon the demographic profile, it can be inferred that the differences in generation gap and years of working experience may influence the significance and outcome of this study. Therefore, to promote workforce agility, school leaders and educational policymakers are proposed to entrust teachers with better autonomy, reform knowledge sharing practices, and equip teachers with the right digital skills. Further, DigComp 2.1 is proposed for the consideration of a new national digital competency framework.

**Keywords:** workforce agility, digital competency, employee empowerment, knowledge sharing, DigComp, teachers, self-determination theory

# **KESAN I-M5ETEKH TERHADAP PENGETAHUAN, SIKAP DAN AMALAN TERHADAP TEKNOLOGI HIJAU DALAM KALANGAN MURID TINGKATAN EMPAT**

Masliana Sahad, masliana7707@gmail.com, Universiti Sains Malaysia  
Dr. Nooraida Yakob, nooraida@usm.my, Universiti Sains Malaysia

## **ABSTRAK**

Perubahan iklim merupakan salah satu cabaran global yang sedang dihadapi oleh umat manusia. Oleh kerana penyebaran yang meluas mengenai akibat buruk dari perubahan iklim terhadap kehidupan manusia, usaha dalam mengatasi masalah perubahan iklim ini perlulah diambil tindakan dengan segera untuk melahirkan generasi dan masyarakat yang sedar akan tanggungjawab memelihara alam sekitar. Lantaran itu, penekanan terhadap teknologi hijau, adalah alternatif yang tepat dalam menangani atau mengurangkan masalah perubahan iklim. Kajian ini dirancang untuk mengenalpasti kesan integrasi model pembelajaran 5E dan teknologi hijau (I-M5ETekH) dalam kalangan murid. Seramai 30 orang murid tingkatan empat terlibat dalam kajian ini. Reka bentuk praujian-pascaujian satu kumpulan digunakan untuk mengukur kesan aktiviti ini terhadap (a) meningkatkan dan mengekalkan pengetahuan murid tentang teknologi hijau; (b) meningkatkan dan mengekalkan sikap murid terhadap teknologi hijau dan (c) meningkatkan dan mengekalkan amalan murid terhadap teknologi hijau. Pengukuran berulang ANOVA sehala menunjukkan perbezaan yang signifikan bagi pengetahuan, sikap dan amalan terhadap teknologi hijau. Hasil kajian juga menunjukkan I-M5ETekH mampu mengekalkan sikap dan amalan murid terhadap teknologi hijau.

Kata kunci: Teknologi hijau, model pembelajaran 5E pengetahuan, sikap, amalan

# **EFFECTS OF TRANSFORMATIONAL LEADERSHIP ON SUBORDINATES' MOTIVATION AT THE UNIVERSITY OF TECHNOLOGY AND APPLIED SCIENCES**

Salim AIBAdi, albadisalim@usm.my, Universiti Sains Malaysia  
Al Amin Mydin, alamin@usm.my, Universiti Sains Malaysia

## **ABSTRACT**

Job motivation can be defined as the process of encouraging an individual or groups of people to activities directed at accomplishing the objectives of the organizations. Studies noted that motivation among subordinates plays an essential role in transforming any organization. Hence, it is necessary for both employers and decision makers to identify what the needs and concerns of their subordinates are and further realize what encourages them to be more productive. In the case with academic subordinates, both intrinsic and extrinsic factors affect their satisfaction. Some research show that lecturers are influenced more by intrinsic satisfaction (Place, 1997). However, other studies claim that they put emphasis on both intrinsic and extrinsic motivation (Herzberg, 1987; Bentley, 2013). Studies suggest that organizations and universities should understand their employees' needs, as it is easier for them to motivate their subordinates. However, it is very clear that the best motivator for employees is something that is indeed valuable to them. Studies proved that job motivation among academic staff has a big impact in providing positive outcomes in the quality of the universities and the students' learning. This is true because the success of a university counts on the academic subordinates. The goal of my study is to investigate the effects of transformational leadership on subordinates' motivation at the University of technology and Applied Sciences (UTAS) in Oman and thus gain all the advantages of it as a suitable model of leadership on all branches of the (UTAS).

Key words: Higher education, transformational leadership, subordinates' motivation, UTAS, intrinsic motivation, extrinsic motivation, satisfaction, academic staff

## **MODUL RS : EMOSI TERJAGA, KEHIDUPAN SEJAHTERA**

Raja Nur Ashraf bt Raja Ariff, rajanurashraf2007@yahoo.com , Universiti Sains Malaysia  
Shahabuddin Hashim, shah@usm.my, Universiti Sains Malaysia

### **ABSTRAK**

Dalam menjalani kehidupan dan pembelajaran seharian di sekolah, kanak-kanak dan remaja warga sekolah tidak akan terlepas daripada mengalami kecelaruan emosi (stres). Persekitaran sosial sekolah amat penting bagi melahirkan individu yang sihat serta suasana yang ceria bagimerangsang kecemerlangan pembelajaran pelajar. Sekolah merupakan institusi yang berpotensi untuk menggalakkan perkembangan psikososial yang sihat bagi menyediakan kesejahteraan mental. Justeru, kesihatan mental amat penting untuk dipromosikan. Kesihatan mental yang baik akan dapat membentuk persekitaran sekolah yang menyokong kesejahteraanpelajar amnya dan warga sekolah khususnya di samping mempunyai implikasi sosial dan akademik. Bagi mengatasi masalah stres dalam kalangan pelajar, satu modul digunakan iaitu Modul Minda Sihat di setiap sekolah. Elemen yang terdapat dalam modul ini baik dan dijadikan sebagai bahan bantuan untuk kaunselor. Sehubungan dengan itu, inisiatif untuk membina Modul RS ini adalah sebagai alternatif kepada kaunselor untuk membantu pelajar dalam isu kesihatan mental. Modul RS ini dibina bagi membantu kaunselor untuk berdepan dengan pelajar yang mempunyai masalah stres, kebimbangan dan depresi. Modul RS membolehkan semua kaunselor mengaplikasikan teknik dan kemahiran dengan lebih menarik dan berkesan. Lima modul yang dibina adalah mencakupi aspek mengurus emosi, membuat keputusan, membina matlamat, relaksasi serta kekal positif. Pembinaan modul RS adalah menggunakan Model ASSURE, di mana proses untuk membina bahan seperti modul bercetak, video pengajaran, perisian komputer dan bahan multimedia. Penguasaan teknologi dalam pembinaan modul ini adalah kekuatan kepada pelajar dan guru. Dalam erti kata lain, penggunaan Modul RS ini dapat membantu pelajar dalam berdepan dengan cabaran yang dihadapi. Dari aspek validasi modul, kepakaran dari kaunselor berpengalaman serta pensyarah jabatan bimbingan dan kaunseling telah digunakan untuk pengesahan modul. Hasil daripada kajian tindakan yang dijalankan terhadap pelajar tingkatan enam di salah sebuah sekolah di Pulau Pinang mendapati bahawa Modul RS sangat membantu mereka dalam menghadapi cabaran terutamanya melibatkan stres dan kebimbangan. Saringan DASS pelajar juga menunjukkan penurunan skor terhadap elemen stres, kebimbangan dan depresi. Modul ini dilihat dapat memperkasakan pelajar dalam menagai cabaran harian melalui teknik dan kemahiran yang diberikan seterusnya lebih dekat dengan pelajar kerana penggunaan teknologi dan gajet yang sering digunakan adalah perkara dekat dengan jiwa pelajar. Adalah amat diharapkan kebaikan dan keberkesanan penggunaan Modul RS ini boleh diperkembangkn lagi ke peringkat lain kerana telah terbukti keberkesanannya. Modul RS ini adalah relevan digunakan di semua sekolah menengah awam mahupun swasta serta dalam kalangan warga PPD serta JPN memandangkan penilaian adalah aspek yang merupakan satu kemestian bagi menentukan hala tuju sesebuah sistem pendidikan.

Kata kunci: Minda Sihat, Tangani stres, Resilien, kehidupan sejahtera

# **THE RELEVANCE OF ETHICS AND DISCIPLINE IN TEACHING HISTORY FOR TEACHER EDUCATION**

Abdulrauf Ado, adoabdulrauf@gmail.com, University of Sains Malaysia  
Shahabuddin Hashim, shah@usm.my, university Sains, Malaysia

## **ABSTRACT**

This paper focusto discuss the ethics and discipline in teaching history. It examines the concept of discipline as well as history; problems that can lead to indiscipline in teaching and some suggested solution to the problems were formulated. Ethics it is a set of principle rules or code which regulate the behavior and conduct of people and bind them together for instance there are professional ethics building various profession such as teaching medicine, legal while discipline as the readiness or ability to respect authority and observe conventional or established laws, of the society to which one belong or that of any organization which he maynot belong but finds himself within temporarily. Finally, conclusion and recommendation were drawn for history teachers to explore and employ for teacher education, more over futureresearch of the area should be able to make the teaching of history interesting for teacher education. Whatever approaches should consider psychological principle in to account. A history teacher should serve as a model to his students. He should modeled appropriate behavior worthy of emulation. Thus, self discipline is very important in the respect new knowledge should be linked to the one already gained, that could be achieved by the use of demonstration.

Key words: Ethics, discipline, history, education

# RELATIONSHIP BETWEEN ACADEMIC PERFORMANCE AND SELF-CONSISTENCY IN KHONAHGRAM

<sup>1</sup>Mohd Khairul Azmi bin Ahmad, bm-3530@moe-dl.edu.my, Kolej Matrikulasi Perak

<sup>2</sup>Shahabuddin bin Hashim, shah@usm.my, Universiti Sains Malaysia

<sup>3</sup>Titiyaka binti Jajuri, titiyakajajuri@yahoo.com, Universiti Sains Malaysia

## ABSTRACT

Both cognitive ability and personality factors plays an important role in determining students' level of academic performance. However, lack of ability on applying cognitive skill during problem solving process and low-level of self-consistency cause a negative impact on the academic performance. The purpose of KhonahGram is to uplift the applying cognitive skills and self-consistency among the students while solving question. Objective of this study is to predict academic performance from self -consistency of the students who joined KhonahGram. The connection between self-consistency and academic performance is shown by the Five-Factor Model of Personality. The operation regulation of KhonahGram was basedon Behaviourism learning theory. KhonahGram is a blended-learning approach which combines textbook referring process and student-teacher interaction using in-trend social media platform such as Telegram. Student's topical test score was used as the performance measure. The frequency of complete daily task submission was count as self-consistency measure. The implementation of KhonahGram was held for 8 weeks. A linear regression analysis with academic performance as the dependent variable and self-consistency of studentsimplementing KhonahGram as independent variables, accounted for 63.2% of the variance in performance. Major strength of KhonahGram implementation was identified such as reforming student's learning orientation. However, there is still a room of improvement for KhonahGram like infusion of negative reinforcements (penalties and fines). From the perspective of feasibility, technically KhonahGram can be applied on other equivalent pre-university programs specifically for Physics subject. Moreover, operationally, the structure of KhonahGram is transferable to all subjects regardless of age level. As a conclusion, KhonahGram was beneficial on uplifting self-consistency and academic performance among the students.

Keywords: KhonahGram, self-consistency, academic performance

# **PEMBINAAN INSTRUMEN KECERDASAN MENGHADAPI CABARAN TERHADAP EFIKASI KENDIRI GURU PELATIH INSTITUT PENDIDIKAN GURU MALAYSIA MENGGUNAKAN MODEL RASCH**

Noraini binti Abu Noh, ainie75@student.usm.my, Universiti Sains Malaysia  
Lim Hooi Lian, hllim@usm.my, Universiti Sains Malaysia

## **ABSTRAK**

Pelan Transformasi Institut Pendidikan Guru (2016-2025) (KPM, 2015) oleh Institut Pendidikan Guru Malaysia (IPGM) telah menetapkan satu standard dalam latihan dan pembangunan guru. Umum mengetahui bahawa dalam pelan tersebut pelbagai aspek telah diberi tumpuan bagi merealisasikan transformasi IPG, antaranya kemenjadian guru pelatih. Sehubungan itu, Instrumen Kecerdasan Menghadapi Cabaran terhadap Efikasi Kendiri Guru Pelatih ini akan dibina bagi mengukur tahap kecerdasan menghadapi cabaran terhadap efikasi sendiri dalam kalangan guru pelatih di IPGM. Dapatan kajian seumpama ini dapat memberi maklumat awal kepada pihak Institut Pendidikan Guru amnya dan pensyarah khususnya bagi merangka program dan pengajaran dan pembelajaran yang lebih efisien. Sampel kajian terdiri dari pelajar semasa dikalangan guru pelatih di 27 buah Institut Pendidikan Guru Malaysia (IPGM) iaitu seramai 30 000 orang. Dari populasi tersebut, berdasarkan Krejcie & Morgan sampel yang akan digunakan adalah seramai 379 orang sahaja. Pemilihan subjek adalah dibuat secara rawak bagi memudahkan pengkaji mendapatkan subjek yang akan menjawab soal selidik. Proses membina instrumen ini juga akan melalui proses rintis yang akan dijalankan di IPG Kampus Pulau Pinang. Tujuan utama kajian rintis dijalankan adalah bagi menentukan kebolehpercayaan dan kesahan instrumen. Kajian rintis yang dijalankan melibatkan bilangan sampel yang lebih besar iaitu sebanyak 5 kali ganda dari bilangan item atau sekurang-kurangnya sebanyak 150 sampel. Pengkaji akan menggunakan model pengukuran rasch yang mempunyai keobjektifan yang spesifik, iaitu kesukaran item bergantung kepada keupayaan individu yang mengambil ujian manakala keupayaan individu pula bergantung kepada kesukaran item (Bond & Fox 2015). Kajian ini dijangka dapat menghasilkan sebuah instrumen pengukuran kecerdasan meghadapi cabaran terhadap efikasi sendiri guru pelatih dengan kesahan dan kebolehpercayaan yang tinggi, selain berupaya mengukur peranan kecerdasan meghadapi cabaran terhadap efikasi sendiri guru pelatih dan menjadi peramal kejayaan dalam menghasilkan guru pelatih yang unggul apabila bergelar guru kelak.

Kata kunci: Kecerdasan Menghadapi Cabaran, Efikasi Kendiri Guru Pelatih IPGM, Model Rasch



# **INSTRUCTIONAL LEADERSHIP IN SAUDI ARABIAN PRESCHOOL**

Samira Alaklabi, samiraalaklabi@student.usm.my, University Sains Malaysia  
Al Amin Mydin, alamin@usm.my, University Sains Malaysia

## **ABSTRACT**

Educational leadership has been explored for more than 50 years to understand the linkage between school leadership and changes in students' learning. As such, it is the major task of efficient instructional leaders and they are obliged to offer effective learning and teaching environments. Therefore, instructional leadership has become increasingly important for educationists and researchers as expectations from schools and efforts to establish a more accountable school system increase and a hot topic for early childhood and for all those who work in the field of early childhood education and care. Instructional leadership is broader than simply classroom observations and direct teaching and includes broader personnel practices and resource management. Instructional leadership in Saudi Arabia education system, the Minister of Education underlines the roles and responsibilities of principals who are accountable for preparing the school environment and have a comprehensive understanding of the objectives of education and awareness of the characteristics of pupils at the stage they serve. The focus of kindergartens and early stages of education in KSA is language and social development. Therefore, instructional leaders in Saudi schools, in accordance with the MOE and Kingdom's vision, emphasize and give priority to academic achievement. Thus, instructional leaders should provide a positive learning environment to enhance the academic achievement and learning process, embedded with enjoyment of learning. In Saudi schools teachers tend to use competition to motivate learning, which limits the benefits of cooperative learning inside classrooms. Educational leaders should therefore aim to guide and facilitate the learning process through participating in children's activities and acquisition of social and communicative skills. For that, Hallinger and Wang's (2015) instructional leadership model will be applied in this study.

Keywords: Education, Instructional Leadership, Preschool, Saudi Arabia

# **THE EFFECT OF DIFFERENTIATED INSTRUCTION STRATEGIES ON THE SELF- CONFIDENCE AND ENGLISH VOCABULARY ABILITY AMONG ELEMENTARY SCHOOL STUDENTS IN THE KINGDOM OF SAUDI ARABIA**

Al Buleyhid Faisal Hamoud M, [fal56000@gmail.com](mailto:fal56000@gmail.com), Universiti Sains Malaysia  
Lim Hooi Lian, [hllim@usm.my](mailto:hllim@usm.my), Universiti Sains Malaysia

## **ABSTRACT**

Differentiated instruction is a method developed over decades from the outcomes of delivering the knowledge to students and theories by research scholars to establish pedagogical movements, particularly when there are disparities in delivering and accepting knowledge among those who are not native speakers of their second language. The present study investigates the effectiveness of using the differentiated instruction strategies on the learning of the English vocabulary for the sixth-grade students of an elementary school in the Kingdom of Saudi Arabia. This research will also help to shape the potential curriculum for teaching English vocabulary for sixth-grade students in Arabic-speaking regions. Based on the requirements and environments of the current investigation, a quantitative, non-equivalent quasi-experimental design is the appropriate study form to meet the aims of this research. This design was chosen due to its compatibility with the study objectives and environmental circumstances. This study will be conducted at an elementary school, located in the Kingdom of Saudi Arabia. The school of study will be selected randomly among all other schools in the region. This study also includes a commonality of differentiated strategies that will be applied in the current study based on literature studies. In the study, questionnaires on self-confidence, employment of differentiated strategies, vocabulary ability tests, and a data collection form for students' demographics will be implemented. This research will also help to shape the potential curriculum for teaching English vocabulary for sixth-grade students in Arabic-speaking regions, which will be adopted by the Ministry of Education.

Key words: Differentiated instructions, Self-confidence, Vocabulary ability, Demographic, Instruction, Adaptation, Development, Difficulties, Content, Product

# THE INFLUENCE OF TEACHER COLLABORATION ON THE TEACHING EFFECTIVENESS IN THE MALDIVES

Mohamed Nasir, mohamed.nasir@student.usm.my, Universiti Sains Malaysia  
Dr. Al-Amin Bin Mydin, alamin@usm.my, Universiti Sains Malaysia

## ABSTRACT

Teaching effectiveness is under consideration by the researchers for decades but still there are factors that affect the teacher effectiveness. Collaboration among the teachers encourages the positive outcomes for both the organization and individuals. Therefore, the aim of current study is to assess the role of teacher collaboration on teaching effectiveness. The current study will be conducted on the teachers in the Maldives as teacher effectiveness is one of the considered subjects. The study adopted the cross sectional design and data was collected from the 396 teachers working in schools in the Maldives. The data was analysed using structural equation modelling using smartPLS 3.3.7. The findings revealed that collaboration has a key role in increasing the effectiveness of the teachers in the Maldives (t value 13.96; p = 0.000). The study contributes to the body of knowledge and assessed the multi-dimensional role of teacher collaboration on teachers' effectiveness. The results of the study indicate that schools need to focus on enhancing the collaborative capabilities of teachers and give importance to teacher collaboration processes in order to improve their effectiveness in terms of delivery of instruction, teacher-student interactions, and regulating student learning. To the best of current study's authors knowledge there is no such study have been conducted before and this is one of its own kind of study.

Keywords: collaboration, effectiveness, SEM, positive outcomes

# PEMILIHAN KATA PERINTAH DAN KEEFEKTIFAN DALAM PUISI BHARATHIDASAN

Malarvali Sanggaran, malar2727@yahoo.com, Universiti Malaya  
Mohana Dass Ramasamy, mohana\_dass@um.edu.my, Universiti Malaya  
Sivapalan Govindasamy, gsiva\_palan@um.edu.my, Universiti Malaya

## ABSTRAK

Kajian tinjauan ini bertujuan untuk pemilihan kata perintah dan keefektifannya dengan menggunakan model skala tekanan bahasa terhadap puisi terpilih Bharathidasan yang membawa kepada reformasi dalam kalangan masyarakat. Kajian lepas terhadap puisi Bharathidasan merangkumi aspek sejarah pemuisi, gaya bahasa puisi, kehebatan puisi dan keindahan metafora. Kajian teliti terhadap pemilihan kata puisi dari segi kata perintah terhadap puisi Bharathidasan tidak pernah dijalankan sebelum ini. Kata perintah yang hadir dalam sesuatu puisi mencerminkan ketegasan atau kelembutan puisi yang membantu dalam mencungkil minda pembaca. Ia juga akan membawa reformasi dalam komuniti. Kajian ini dapat meneliti kata perintah dalam puisi Bharathidasan dan skala ketegasan rendah ke tinggi dengan menggunakan model pilihan bahasa. Kajian ini menggunakan metodologi kajian berbentuk kajian kepustakaan dalam menganalisis puisi Bharathidasan. Reka bentuk kaedah analisis tekstual digunakan untuk pemahaman terhadap struktur puisi. Teori kata perintah jenis *eeval vinaimuRRu* dan *viyangkooL vinaimuRRu* diperhalusi dalam puisi terpilih Bharathidasan. Seterusnya model skala tekanan bahasa dan cara pengukuran keefektifan kata perintah juga dibincangkan. Perbincangkan kata perintah, diberikan jenis kata perintah mengikut teori ahli akademik bahasa Tamil. Seterusnya kata perintah tersebut dibincangkan keberkesanan dengan menggunakan model skala tekanan bahasa. Seterusnya analisis dapatan kajian dan kesimpulan kajian. Sebagai kesimpulan, penyelidikan ini merumuskan implikasi kajian dan signifikansi kajian.

Kata kunci: puisi, Bharathidasan, keefektifan kata perintah

## **TEKNIK HIRUBA: MEDIUM KEMAHIRAN MEMBACA BAHASA ARAB DALAM PEMBELAJARAN TERBEZA**

Hajarah Bt Muharam, [ummumujahidah79@gmail.com](mailto:ummumujahidah79@gmail.com), Sekolah Kebangsaan Bangingod, Lahad Datu  
Sabah

Nurul Ashikin Binti Mohamad Baharin, [ashikin880801@gmail.com](mailto:ashikin880801@gmail.com), Sekolah Kebangsaan Dato Ahmad  
Said Tambahan, Ipoh Perak

### **ABSTRAK**

Penyelidikan ini dibuat bertujuan untuk melihat sejauh mana keberkesanan Teknik Tikrar HiRuBa dapat membantu murid-murid ditahap penguasaan yang lemah dalam kemahiran membaca bagi pelajar tahap 1 merujuk kepada Dskp S.K: 2.3.2 iaitu murid dapat membaca suku kata dalam perkataan dan tahap 2 Dskp S.K: 2.2.2 murid dapat membaca perkataan. Sampel kajian ini dijalankan kepada 4 orang murid sekolah dikawasan luar bandar. Pendekatan kajian yang dilaksanakan oleh penyelidik adalah kajian lapangan secara temu bual dan pemerhatian. Manakala analisis data yang digunakan melalui pencapaian markah murid. Hasil kajian menunjukkan bahawa Teknik Tikrar HiRuBa adalah salah satu medium pembelajaran yang sangat berkesan dan interaktif dalam usaha meningkatkan kemahiran membaca. Penyelidik berhasrat menjadikan kaedah ini dapat dipraktikkan dalam bentuk lebih menarik dan mudah diaplikasikan sesuai dengan perubahan sistem pendidikan Malaysia yang menekankan penggunaan teknologi di masa akan datang.

Kata kunci: Kemahiran membaca; Suku kata; Perkataan Bahasa Arab

# **PENGARUH AMALAN PENYELIAAN TERHADAP PENGAJARAN KREATIF GURU**

Chuah Siew Mei, smchuah\_02@yahoo.com, Universiti Sains Malaysia  
Al Amin Mydin, alamin@usm.my, Universiti Sains Malaysia

## **ABSTRAK**

Pengajaran kreatif guru perlu diberi perhatian dalam usaha memupuk budaya kemahiran berfikir aras tinggi (KBAT) dalam kalangan murid. Kajian ini bertujuan untuk mengkaji pengaruh amalan penyeliaan terhadap pengajaran kreatif guru. Kajian kuantitatif berbentuk tinjauan menggunakan soal selidik sebagai instrumen kajian untuk pengumpulan data kajian. Kajian ini melibatkan 209 responden daripada 11 buah sekolah rendah di daerah Timur Laut, Pulau Pinang dipilih secara rawak sebagai sampel kajian. Data dianalisis melalui kaedah statistik deskriptif dan inferensi yang menggunakan perisian Statistical Package for Social Science (SPSS) Versi 26.0. Dapatan kajian menunjukkan amalan penyeliaan dan pengajaran kreatif guru diamalkan pada tahap yang tinggi. Dapatan kajian juga membuktikan bahawa amalan penyeliaan mempunyai pengaruh yang signifikan terhadap pengajaran kreatif guru. Sebagai maklum balas, penyelidik mengemukakan cadangan untuk diberi perhatian oleh pihak berkepentingan. Implikasi dapatan kajian dan cadangan kajian lanjutan turut dibincangkan dan dicadangkan bagi penyelidikan masa hadapan.

Kata kunci: Amalan penyeliaan, efikasi sendiri, pengajaran kreatif guru

# **ANALYSIS OF THE PROBLEM APPLICATION OF VIRTUAL LABORATORY MEDIA WITH PROJECT BASED LEARNING AND PROBLEM BASED LEARNING MODELS SUPPORTS CRITICAL THINKING, CREATIVE, AND COMMUNICATION SKILLS OF INDEPENDENT STUDENTS STUDYING AT HIGH SCHOOL TEACHERS IN SAMARINDA CITY**

Elsje Theodora Maasawet, [emaasawet@gmail.com](mailto:emaasawet@gmail.com), Evie Palenewen; Herlan Perdana Putra

## **ABSTRACT**

The analysis aims to find out the problems of teachers and students that occur in Biology learning activities at Samarinda City High School in the era of independent learning. The target of this analysis is to determine the level of understanding of Biology teachers regarding the use of Virtual Laboratory Media with Project Based Learning and Problem Based Learning Models in the Independent Era of Student Learning, as well as existing learning tools. The observation sample is a Biology teacher at Samarinda City High School. The results of the observations showed that 30.50% of Biology teachers were not familiar with the term Media Virtual Laboratory; 60.50% of teachers are familiar with the Media Virtual Laboratory but experience problems in implementing it during learning; 80% of teachers are less skilled in carrying out learning through virtual laboratory media. 64% of teachers have implemented the Project Based Learning model but it is not yet appropriate according to the syntax; 75% of teachers stated that the main obstacle to implementing PjBl in learning in the Merdeka era for student learning was the limited study time. there are 43% of Biology teachers have not applied the Problem Based Learning (PBL) model in the learning of the independent era of student learning; 57% of biology teachers at Samarinda City High School have applied the PBL model but incorrectly used the PBL syntax. 87% of Biology teachers at Samarinda City High School stated that students' critical thinking skills, creativity abilities, and students' communication skills were very low; 75% of students tend not to ask questions in learning; 60.30% of teachers stated that students' problem solving was very low because most of the students' interest in learning was still lacking, as well as the lack of awareness of students to discuss so that students faced difficulties in understanding concepts and solving problems on their own. In addition, the problem also faced is that there are still many teachers who have not implemented learning models including PjBl and PBL that support students to think critically, creatively, and comically. From the results of observations about problem analysis of Biology teachers in Samarinda City High School 98% of Samarinda High School Biology teachers hope that their school can be used as a modeling place through the implementation of learning using Virtual Laboratory Media because through the application of virtual media Laboratory Project Based Learning and Problem Based Learning can Support Thinking Ability Critical, Creative, and Communication Students of the Independent Era of Learning.

Keywords: Virtual Laboratory, PjBl, PBL, Critical Thinking, Creative, Communicative

# **CAMPUS SUSTAINABILITY IN THE HIGHER EDUCATION OF SAUDI ARABIA**

Abdullah Alomar, [a.o.alomar@live.com](mailto:a.o.alomar@live.com), Universiti Sains Malaysia  
Al Amin Mydin, [alamin@usm.my](mailto:alamin@usm.my), Universiti Sains Malaysia

## **ABSTRACT**

Higher education institutions act as a place to create a transformation of campus to a green and sustainable environment as well to prepare most of the individual with the awareness, knowledge and also skills towards. In context of Saudi Arabian High Learning Institution, Campus Sustainability is a part of Saudi Arabia's Vision 2030. Focus of this paper is to highlight the components of Campus Sustainability based on the model proposed by Alshuwaikhat and Abubakar, 2008. There are 3 main dimensions of Campus Sustainability which are University Energy Management System, Public Participants and Social Responsibility and Sustainability Teaching and Research. Energy management system is important as it maintains the organization through the process of decision making including goal assessment, preparing actions, executing actions and measuring outcomes, evaluating progress. Public Participation and Social Responsibility is a social process that should be made to facilitate the participation of the individual, another attempt to stress the importance of the participation process and its goal of satisfying their needs. Sustainability Teaching and Research is about sustainability competence achieved if there is a participation of senior management, the integration of sustainability in all the activities at the institution level, continuous sustainability training as well to encourage the implementation, the role and awareness of teachers and staff about the meaning of sustainability should be explained. A comprehensive literature literature review about the importance of Campus Sustainability in context of Saudi Arabia's Higher Learning Institution will open the eyes of stake holders in this region.

**Keywords:** Energy Management System, Public Participation and Social Responsibility, Sustainability Teaching and Research



# **PREPARING CREATIVE TEACHERS TO MANAGE INNOVATIVE LEARNING STRATEGY DURING COVID-19 PANDEMIC IN REMOTE AREA SCHOOLS**

Makrina Tindangen, makrin\_tindangen@yahoo.co.id, Mulawarman University  
Aloysius Hardoko, aloysiushardoko@gmail.com, Mulawarman University  
Fransiskus Hendy Tri Harsanto, fransiskus95@gmail.com, Yayasan Kasih Sehati

## **ABSTRACT**

The cause of remote area teachers having problems in managing innovative learning during the COVID-19 pandemic is due to internal and external factors. Internal factors due to lack of competence so they have not been creative in preparing and implementing innovative learning strategies. External factors are the lack of teacher facilitation activities to improve competence. The purpose of the research is to prepare remote area teachers to have good competence so that they can creatively manage innovative learning strategies during the COVID-19 pandemic. Descriptive quantitative research method with online training pretest posttest design. The research instrument for the performance of the innovative learning strategy learning device and the observation sheet for the implementation of peer teaching. The results of the research on the performance of innovative learning strategy learning tools after training (posttest) were better than before training (pretest). Peer teaching in training facilitates teachers to suitably apply the device with the device plan, as well as skills in the implementation of learning. The conclusion of the training with the pretest posttest design and online peer teaching activities is effectively used to prepare teachers to be creative in managing innovative learning strategies during the COVID-19 pandemic in remote school areas.

Keywords: creative teacher, innovative learning, pandemic era, remote area

# **UTILIZATION OF ISRAELI GRASS STEMS (*ASYSTASIA GANGETICA* L.) AND DARA TREAD STEMS (*CATHARANTHUS ROSEUS* L.) AS BOTANICAL PESTICIDE ON GREEN SPINACH (*AMARANTHUS TRICOLOR* L.)**

Sonja V. T. Lumowa, verasonja@yahoo.com, Mulawarman University  
Purwati, purwati7504@gmail.com, Mulawarman University  
M. Maulana Firgie Pradikta, maulanafirgie27@gmail.com, Mulawarman University

## **ABSTRACT**

Green spinach (*Amaranthus tricolor* L.) is a vegetable with protein, fat, carbohydrates, iron, potassium, calcium, amarantin, rutin, purines, chlorophyll, phytophyll and vitamins A, B and C. But the increasing need for green spinach in the community, was not accompanied by the increased production. This was caused by several factors, one of which was pests. Some insect pests that often attacked green spinach were grayak caterpillars, grasshoppers, aphids and also snails. This study aimed to determine the influence of israeli grass stem extract and dara tread stem (*Euphorbia hirta* L.) that could be applied to green spinach plants (*Amaranthus tricolor* L.) in an effort to overcome the intensity of pests in samarinda city. This study lasted for approximately four months, namely from March 2021 to June 2021. The research was conducted in the green spinach garden of North Sempaja village, North Samarinda District, Samarinda. The data obtained from observations and calculations were then analyzed using Analysis of Variance (ANOVA) and treatment was tested with advanced BNT test with a significant level of 5%. The results of this study showed that the mixture of israeli grass stem extract and extract of dara tread stems had an influential effect in the decline of pests in green spinach plants with the most effective concentration of 80% due to the content of flavonoids, alkaloids, tannins, terpenoids, phenols, quinins, sterols and steroid saponins known from previous phytochemical test results.

**Keywords:** Israel Grass Stem, Dara Tread Stem, Botanical Pesticides

# THE EFFECT OF THE WORD SQUARE LEARNING MODEL AND SPELLING PUZZLE MEDIA ON STUDENT'S COGNITIVE LEARNING OUTCOMES ON THE MATERIAL OF THE HUMAN MOTION SYSTEM

Silviani C. Evangelista Rea, [silviclaris68@gmail.com](mailto:silviclaris68@gmail.com), the University of Mulawarman  
Elsje Theodora Maasawet, [emasawet@gmail.com](mailto:emasawet@gmail.com), the University of Mulawarman  
Didimus Tanah Boleng, [didimus.tanahboleng@yahoo.com](mailto:didimus.tanahboleng@yahoo.com), the University of Mulawarman

## ABSTRACT

The problem that occurred in VIII<sup>th</sup> grade students of Junior High School Negeri 31<sup>th</sup> at Samarinda city was the low cognitive learning outcomes caused when the teacher still uses conventional methods during the learning process and most of the students did not pay attention to the teacher's explanation in front of the class. Based on that problem, this study is conducted to find out the Word Square learning model with the help of spelling puzzle media which affects the cognitive learning outcomes of students on the material of the human motion system. This type of research is a Quasi-experiment with the Nonequivalent Control Group Design research design. The sampling technique using purposive sampling. The result of this study were analyzed using independent sample t-test. The mean score of class VIII C taught by using Word Square learning model with the help of spelling puzzle media was 72.8, while the mean score of class VIII B taught by using conventional learning model was 57.12. The analysis of t-test was gotten by posttest experiment and posttest conventional was gotten by sig. value  $0.000 < 0.05$ . It can be concluded that the word square using puzzles spelling media influenced the result of student cognitive learning in human movement materials.

Keywords: Word Square, Spelling Puzzle, Cognitive Learning Outcomes

# **PROBLEM ANALYSIS OF LEARNING EQUIPMENT DEVELOPMENT THROUGH A THINKING APPROACH TO IMPROVE CRITICAL THINKING ABILITY AND SCIENCE LEARNING OUTCOMES FOR JUNIOR HIGH SCHOOL STUDENTS**

Etik Setijawati, etiksetijawatis2@gmail.com,  
Elsje Theodora Maasawet, emasawet@gmail.com, the University of Mulawarman

## **ABSTRACT**

The objectives of this development research are: (1). To obtain an overview of the obstacles experienced by teachers in developing Learning Tools based on the MIKiR Approach (2). To get an idea of the extent to which teachers are constrained in recognizing and implementing active learning with the MIKiR approach in training students' critical thinking skills (3). To obtain an overview of the application of the types of assessments carried out by teachers in measuring learning outcomes and students' critical thinking skills. The data collection technique used observation with survey methods in the form of questionnaires distributed to 6 junior high schools in Muara Badak District with 10 teachers teaching science as respondents. Teachers have difficulty indicators but only 30% implement these indicators in developing learning tools so that it has implications when using the learning tools they have made in teaching and learning activities. From the survey results obtained data 80% of respondents have difficulty in developing learning tools and 50% have difficulty using learning tools that have been made in learning. 2) Teachers only know about active learning with the MIKiR approach so they don't implement it in learning because they don't know the steps for implementing the learning. Where the data obtained are 100% of respondents already know the MIKiR approach but only 30% of respondents have implemented the MIKiR approach and 67% have experienced problems in implementing it. 3) The teacher's lack of ability in assessing critical thinking skills is caused by not knowing the indicators of critical thinking. obtained 80% of respondents know critical thinking From the results of the observations, it was also obtained data that 100% of respondents felt the need and 80% of respondents agreed that the MIKiR approach was implemented in their schools so that they got examples of tools and modeling of the MIKiR approach in training students to think critically so that they hope to improve science learning outcomes.

Keywords: Problem Analysis, Development of Learning Tools, MIKiR Approach, Critical Thinking

# MODUL #WIWWYA: MEMBINA KEMAHIRAN PENTAKSIRAN KENDIRI DALAM KALANGAN PELAJAR PRA-UNIVERSITI ALIRAN SAINS

Jahari Jainal, SMK All Saints Kota Kinabalu

## ABSTRAK

Malaysia telah menukar kurikulum bersepadu kepada kurikulum baharu berasaskan standard mulai tahun 2011. Salah satu tujuan transformasi kurikulum ini adalah untuk guru melaksanakan pentaksiran sebagai pembelajaran (assessment for learning) untuk menambahbaik strategi pentaksiran bilik darjah yang merupakan sebahagian daripada pentaksiran berasaskan sekolah (Ministry of Education Malaysia, 2011). William & Thompson (2007) menyenaraikan lima strategi untuk memastikan pentaksiran sebagai pembelajaran di dalam bilik darjah adalah efektif dan salah satu strategi tersebut adalah memberikan murid autonomi di dalam pembelajaran mereka. Dalam perkataan lain, strategi pengajaran guru di dalam bilik darjah mesti mengandungi unsur kemahiran pentaksiran sendiri. Oleh itu, pengkaji menghasilkan modul #WIWWYA untuk membina kemahiran pentaksiran sendiri murid dalam pembelajaran dan pemudahcaraan (pdpc). Modul #WIWWYA menggabung jalin tiga komponen pdpc iaitu objektif pembelajaran, kriteria kejayaan dan penulisan #WIWWYA. Kajian ini telah dilaksanakan selama sebulan sepanjang Januari 2020 melibatkan 8 orang murid lelaki dan 4 orang murid perempuan tingkatan 6. Data dikumpulkan melalui temu bual dan penulisan #WIWWYA di dalam modul. Analisis tematik digunakan untuk menjanakan kod dan tema dapatan kajian. Dapatan daripada temu bual mendapati murid boleh membina kemahiran pentaksiran diri menggunakan objektif pembelajaran untuk menetapkan matlamat pembelajaran. Kriteria kejayaan membantu murid membuat pentaksiran sendiri dengan lebih spesifik dan boleh mempengaruhi motivasi murid. Ke dua dua komponen ini, objektif pembelajaran dan kriteria kejayaan boleh menyediakan murid untuk belajar, membantu murid fokus kepada maklumat penting dalam pdpc dan membuat strategi penambahbaikan. Penulisan #WIWWYA juga dapat membina kemahiran pembelajaran *regulasi* sendiri murid. Analisis penulisan #WIWWYA menunjukkan pentaksiran sendiri murid dibuat berpandukan kriteria kejayaan. Analisis juga mendapati murid dapat menyatakan kelemahan dengan terperinci dan tindakan yang patut dilakukan pada masa hadapan (pembelajaran *regulasi* sendiri).

Kata kunci: Pentaksiran bilik darjah, pentaksiran untuk pembelajaran, pentaksiran sendiri murid.

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