

JULY, 29TH 2021

ABSTRACT BOOK

THEME:

"IMPROVING ASSESSMENT AND EVALUATION STRATEGIES ON ONLINE LEARNING"































WELCOME SPEECH

WELCOME SPEECH – RECTOR OF UNIVERSITAS NEGERI MALANG 5th INTERNATIONAL CONFERENCE ON LEARNING INNOVATION (ICLI 2021)

Malang 29th July 2021,

Dear Excellencies, Distinguished Speakers, ICLI 2021 Participants, Ladies and Gentlemen,

It is my great pleasure, on behalf of the State University of Malang, to welcome all of you, to participate in the 5th International Conference on Learning Innovation (ICLI) 2021. This is a collaborative academic event, one of many prominent events conducted together with Universitas Negeri Malang, Universitas Jember, Universitas Mulawarman, dan Universitas Sultan Ageng Tirtayasa and Islamic Development Bank (IsDB), which has reached the fifth year already. Moreover, this year is very interesting since we've started a collaboration with our co-organizer, Universiti Teknologi Mara (UiTM), Perlis, Malaysia.

Ladies and gentlemen, the issues of Industrial Revolution 4.0 and society 5.0, Covid-19 pandemic era and its Disruptive Technology require innovation in education and learning, which now needs evaluation and more of critical importance. This is the era of a new type of challenges, also for us in a higher education institution. And this is the time to prepare the young generation to shape the future of our society. Many approaches and innovative methods should be suitable for the generation, the educational resources should respond the global issues. Universitas Negeri Malang (UM), through the Institute of Education and Learning Development (LP3) has been working to meet the requirements of this modern era. This will also bring the involvement of trans-discipline approaches where the disruptive technology issues will be addressed. UM has also initiated the centre of excellence (CoE) for Learning Innovation, The PUI-PT Disruptive Learning Innovation, with the support from the Ministry of Research, Technology, and Higher Education, this year.

This ICLI 2021 conference is designed for the experts of education and learning, to come together to make efforts to respond the disruptive technology worldwide. With the spirit of cooperation and collaboration, we indeed could provide better comprehension about our situation as well as preparing a guideline for modern education which covers all modern issues.

Ladies and Gentlemen, I would like to extend my sincere gratitude to all institutions, all keynote speakers: Prof. Gavin Brown (New Zealand), Prof. Stuart Kime (United Kingdom), Prof. Weishen Wu, PhD (Taiwan), Dr. Eng. Muhammad Ashar, S.T., M.T. (Indonesia), Dr. Mohammad Fadhili Yahaya (Malaysia), Dr. Rer. Nat. Suseno Amien (Indonesia), sponsors, both organizing and scientific committee members, and all participants for making this conference possible and successful. We wish you all have a very successful conference.

Thank you,

Prof. Dr A.H. Rofi'uddin, M.Pd

OPENING REMARKS - CHAIRMAN 5th INTERNATIONAL CONFERENCE ON LEARNING INNOVATION (ICLI 2021)

Malang 29th July 2021,

Bismillahirahmanirrahim Assalamualaikum warahmatullahi wabarakatuh

Dear Excellencies, Distinguished Speakers, Participants, and Ladies and Gentlemen.

I am very pleased to be here today as this is my first opportunity as the chairman of the 5th International Conference on Learning Innovation. Welcome to the annual international conference in our beloved Universitas Negeri Malang (UM). This is an annual collaborative academic event organized by UM and in collaboration with The Islamic Development Bank (IsDB), Center of Excellence Universitas Jember (UNEJ), Universitas Mulawarman (UNMUL), dan Universitas Sultan Ageng Tirtayasa (UNTIRTA). This year we enhance our collaboration with overseas university, Univerti Teknologi MARA (UiTM) Cawangan Perlis Kampus Arau. Hopefully, it can improve our spirit, knowledge, and research collaboration. Moreover, it can also increase the quality of the International Conference on Learning Innovation (ICLI).

UM, through the Institute of Education and Learning Development (LP3) has been working to meet the requirements of the modern era. The fifth ICLI is held on July 29, 2021. Since the outbreak of coronavirus (Covid-19), there have been some challenges in our educational system, especially in assessment and evaluation of online learning. The assessment should be suitable and effective applied for online learning. On the other hand, in this pandemic era, we should also prepare our students to get ready with industrial revolution 4.0. Therefore, the theme of the ICLI 2021 is "Improving Assessment and Evaluation Strategies on Online Learning". In line with this big theme, we invited several speakers who have expertise in the assessment and evaluation on online learning from different countries, culture and research field. They will share their knowledge and research which can be implemented on our teaching and learning.

Ladies and Gentlemen, allow me to introduce our keynote speakers: Prof. Gavin Brown (University of Auckland, New Zealand), Prof. Stuart Kime (Evidence Based Education, United Kingdom), Prof. Weishen Wu, PhD (Dayeh university, Taiwan), Dr. Eng. Muhammad Ashar, S.T., M.T. (States university of Malang, Indonesia), and Dr. Mohammad Fadhili Yahaya (University Teknologi Mara Perlis Branch, Malaysia). In addition, we have one special speaker Dr. Rer. Nat. Suseno Amien (Learning Innovation, PMU IsDB, Indonesia) and four invited speakers from the Center of Excellence 4 in 1 IsDB and and two invited speakers from UiTM, Malaysia. There will be Dr. Eng. Didik Dwi Prasetya, S.T., M.T. (UM), Dr. Rida Oktorida Khastini (UNTIRTA), Dr. Latisha Asmaak Shafie (UiTM), Anton Rahmadi, S.TP., M.Sc., Ph.D (UNMUL), Erlia Narulita, S.Pd., M.Si., Ph.D. (UNEJ), dan Dr. Razlina Razali and Dr. Farah Lina Azizan (UiTM).

Finally, I would like to express my profound gratitude to all institutions involved in this conference, steering, organizing and scientific committee members, and all participants, for all outstanding efforts and making this conference possible and successful. We wish you all enjoy and have an empowering academic activity in this conference. I look forward to the years ahead in this conference.

Thank you very much, Eli Hendrik Sanjaya, S.Si., M.Si.,Ph.D. Chairperson ICLI 2021

OPENING REMARKS - SPEECH BY PROFESSOR DR MOHD AZLAN MOHD ISHAK DEPUTY RECTOR OF ACADEMIC AFFAIRS OF UITM PERLIS BRANCH

Malang 29th July 2021,

Bismillahirahmanirrahim

Assalamualaikum warahmatullahi wabarakatuh

- Professor Dr. AH. Rofi'uddin, Rector of Universitas Negeri Malang,
- Chairperson of ICLI 2021, Dr. Eli Hendrik Sanjaya,
- Dr. I Wayan Dasna, Chairperson of LP3 Universitas Negeri Malang,
- Senior management of Universitas Negeri Malang,
- Committee Members of ICLI 2021,
- Distinguished guests,
- Ladies and gentlemen

Welcome to the 5th International Conference on Learning Innovation 2021. On behalf of Universiti Teknologi MARA Perlis Branch, I would like to extend my greatest gratitude to Universitas Negeri Malang for giving us the pleasure to be affiliated in this prestigious event. As our MoU partner, Universitas Negeri Malang has been actively collaborating with Universiti Teknologi MARA on various programmes over the past years. This year, UiTM Perlis Branch is honoured to be invited as the steering committee for ICLI 2021.

Ladies and gentlemen,

Since 2020, the COVID-19 pandemic has adversely impacted everyone globally. The educational system worldwide is also not spared from being affected by the ongoing pandemic. Without a choice, teaching and learning activities have been forced to migrate online and conducted remotely to curb the spread of the virus. Despite these challenging times, the education sector has shown resilience and perseverance in adapting to these changes to ensure that the teaching and learning is survived.

It has been more than a year since WHO declared COVID-19 a pandemic. Now working from home and remote online learning have become part of our new normal. Along this new norm, innovative approaches, techniques and methods of online teaching, learning, assessment and evaluation have been developed to cater to this rapidly changing world.

The International Conference on Learning Innovation provides a good platform for the dissemination of knowledge, research ideas and innovation on online assessment and evaluation which will help educators, researchers, practitioners, students and education stakeholders to overcome the challenges and meet the demands of this 21st century. I believe that the presenters and participants will leave the conference with better insights that will help to enhance the online teaching and learning discourse.

Last but not least, I would like to convey my deepest gratitude and congratulations to Universitas Negeri Malang and their partners - Islamic Development Bank and Indonesian Consortium for Learning Innovation Research for their effort and hard work in making this virtual conference a reality. I wish great success for this conference and we look forward to future collaborations with Universitas Negeri Malang.

Wabillahittaufiq Walhidayah Wassalamualaikum Warahmatullahi Wabarakatuh

Thank you very much,

ORGANIZERS AND SPONSORS





















ABSTRACT LIST

WELCOME SPEECH	
ORGANIZERS AND SPONSORS ABSTRACT LIST	VI VII
Assessment Principles That Every Teacher Should Understand	2
A Vision of Assessment and Evaluation on Online Learning in the Post COVID Era	3
Assessment in the Technology Age: Purposes, Consequences, & Infrastructure	4
U-Learning: Rethinking Assessment for 21st-Century Learners	5
Visual Game Smoking Awareness using Design Thinking for Acceptable Testing Kids Education	6
ABSTRACT SPECIAL SPEAKERS	
Learning Innovation: Challenges and Hopes During The Pandemic	8
ABSTRACT INVITED SPEAKERS	
An Empirical Study of Enhancing Creative Thinking and Collaboration Skills Through ILC3 Learning Model	10
Embracing Uncertainities: A Collaborative Ethnographic Exploration of Emergency Remote Teaching at Higher Education During The COVID-19 Pandemic	11
Improving Students' Achievements in Online Learning using Cumulative and Sustainable Concept Mapping	12
Social Media as Learning Tools: Perceptions of Students in a Malaysian Public University	13
Strengthening Learning Innovation with Digital Infusion on Small Medium Enterprise Empowerment During the COVID-19 Pandemics: Case Study of SME Internships in East Kalimantan	14
Video Blogging (VLOG) as a Learning Method for Solving Environmental Problems in Ecology Course during The Covid-19 Pandemic	15

ABSTRACT THE 5 TH ICLI 2021 AUTHORS (ORAL PRESENTATION)	
Anak Muslim Hebat Boardgame as Al-Qur`An Learning Media for Children	17
Analysis of Disease Distribution and Vulnerability of Dhf in Palembang City	18
Analyze of Enhancing Students' Understanding of Concepts in Learning Cycle 7E Integrated with Web-Based Formative Assessments	19
Analyzing Student Perform Through Predictive Analytic in Moocs Learning Environment	20
Assessing Speaking Skill to Indonesian High Schoolers Who Studied English as a Foreign Language in Remote Language Learning Context	21
Assessment in Character Education: The Praxis of Character Education in Mataraman Families	22
Blended Learning Model "Gawi Manuntung" Based on Local Wisdom to Improve Critical Thinking, Creative Thinking, Problem-Solving, Analytical Thinking, and Logical Thinking	23
Competency Development of Islamic Education Lecturers with Asynchronous Learning During The Covid 19 Pandemic: Preliminary Research	24
Conceptual Development of Cybercounseling Skills Training Design for Middle School Guidance and Counseling Teachers	25
Conceptual Development of Helper's Assessment Skills Training Design on Inmate's Resilience in L-Sima	26
Conceptual Development of Online Psychological Assessment Training Design for Guidance and Counseling Teachers on The Academic Life of High School Students	27
Creative Conjecture: Abductive Reasoning to Generate Idea in Algebra	28
Developing Digital Comic Media: A Platform for Online Course	29
Developing Ma-Prscb Competency – Based E- Learning Module for Postgraduate Research Students	30
Development of <i>Android</i> -Based Interactive Multimedia on Interaction of Living Things with The Environment Topic for Seventh Grade Junior High School to Improve Student's Learning Motivation	31
Development of Audio Mixer Trainer Equipped Power Amplifier for Audio Video Engineering Courses in Electrical Engineering Educational Study Programs	32
Development of Assessment Instrument Through Quizizz for The 9 th Grade Students at Smpn 44 Surabaya	33
Development of E-Learning Based on Augmented Reality (AR) on Reductio-Oxidation Reaction Topic	34
Development of Edu-Kit Media for Entrepreneurship Learning Based on Gamification Model Toward Disruptive Education	35

Development of Virtual Reality-Based Learning Media on Chemical Bond Materials and Molecular Shapes for Grade 10th of Senior High School Students	36
Development of Virtual Reality Content to Improve Social Skills in Children with Low Function Autism	37
Disaster Education with Disruptive Virtual Reality Media for Social Character Development of Indonesian Children	38
Disruptive Learning Media Integrated E-Generator Practice System to Advance Self-Efficacy Learners Levels in Era of Education 4.0	39
Educational Communication Analysis: Bully, Facilitative, and Motivative in Indonesia Early Childhood Education	40
Effect of Pbib Learning Model on Student's Cognitive Skills	41
Effect of Project Based Learning Model Based on Edmodo Application on Students' Learning Interest	42
Effectiveness of Using Games "Circuit:Logic Gate Puzzle.Apk" as Scaffolding in Logic Gate Learning	43
EFL Teachers' Professional Development Through Creative Prompt Writing for Building Children Characters	44
Emotion Detection at Comments in Media of Online Learning Using Artificial Intelligence	45
Engine Management System Onboard to Improve Problem Solving Abilities	46
Evaluation Program Building Learning Power	47
Experience Using A Five-Component Blended Learning Strategy During The Covid-19 Pandemic	48
EYL Teachers' Perceptions and Practices of Assessing Creative Writing	49
Fe3-xCoxO4/PEG/GO Nanocomposite from Coconut Skin Waste for Radar Absorbing Materials	50
Investigating the Memory Retention in Extension Concept Mapping	51
Islamic Boarding Schools and Human Rights Enforcement (HAM) Transmission of Cultural Values for Disabilities at An-Nur Islamic Boarding School	
Bener Meriah Aceh	52
I Prefer Asynchronous Now: Student's Preference and Teacher's Accomodation	53
Identification Counselor-Student's Mind Skills as Their Metacognitions Level in Counseling Process	54
Implementation of The Discovery Learning Model to Increase Student's Interest in Regional Economics Courses	55
Improving Expressive Communication in Children with Autism Using Social Story and Picture Exchange Communication System	56
Improving The Competency Of Vocational Productive Teachers Through Industrial Cooperation Based on Regional Potential	57

Improving The Validity of Multiple Choice Tests to Measure Students' Problem- Solving Ability of Buffer Solution Concep on Online Tests	58
Integrating Elements of Gamification-Based Assessment into Authentic Learning of The Graph Theory Application Online Course	59
Interactive Web Learning for Cad 3d Courses to Increase Special Practice Skill of College Student in Pandemic Situation	60
Learning Management System to Improving Students Computational Thinking Skills with Assessment for Learning Method	61
Learning Media Innovation Based on Artificial Intelligence Intregrated with Ubiquitous Learning	62
Pictures Don't Lies: An Adaptive Learning Model with Augmented Reality for Chinese Characters Recognition Parties of Potters Stars Operation Populting Number has a day Ability Level	63
Profile of Pattern Story Question Resulting Number based on Ability Level of Mathematics Students Class VII SMPN 21 Bulubonggu	64
Platform for Design, Writing, and Publication of Scientific Articles Based on Class Action Research (Car) Integrated Internet of Things to Improve Teacher's	<i>.</i> .
Pedagogical Competence	65
Policy Directions For The Management of Dhf in The City of Palembang	66
Religiosity and Nomophobia Among Undergarduate Student: The Moderating Role of Self-Control	67
Self-Assessment: How Do Accounting Students Respond it?	68
Student's Perceptions of Digital Pedagogy at the University of Lagos, Nigeria	69
Student Self-Regulated Learning Strategies on Pandemic Covid-19	70
Technical Vocational Education and Training (Tvet) Innovation with Competency-Based Training Model in Improving Human Resource Soft-Skills	71
Technopreneurship Mindset: The Behavioural Intentions of Indonesian and Nigerian Undergraduates in an Emerging Society 5.0	72
Text Mining for Clasification Material in Online Learning	73
The Development of Educational Novel as a Source of Self-Study for Senior High School Students on Radioactive Elements	74
The Development of Learning Media Based on Augmented Reality, Hologram, and Ludo Game on The Topic of Molecular Shapes	75
The Development of Organic Chemistry Teaching Materials 2 by Using Android-Based Stem Approach	76
The Development of Virtual Laboratory on Qualitative Analysis Chemica Practicum Cation Group I And Ii Based on Multiple Representation with Internet Integrated	77
The Effectiveness of Contextual Problem-Solving Based Integrative Online Learning on Fundamental Physics for Higher Education	78

Areas and Superior School Majors to Increase the Effectiveness of Learning and National Policy Programs	79
The Innovation of Hi-World Smart Book Integrate with AR to Accelerate The Recovery of Covid-19 Patients in The Disruptive Era	80
The Integration of Augmented Reality into Mooc's in Vocational Education to Support Education 3.0	81
The Kirkpatrick Model Integrate with 4-Level as an Evaluation Design for The implementation of Vocational Educator Training in The 21st Century	82
The Role of Machine Element Applications (MEA) to Support The implementation of Distance Learning in Machine Element Course	83
The Role of Metacognitive Knowledge, Metacognitive Skill, Epistemological Understanding and Intellectual values to Control of Variables Strategy	84
The Significance of Office Technology Interactive E-Module Based on Kotobee for Vocational High School	85
ABSTRACTS THE 5 TH ICLI 2021 AUTHORS (POSTER PRESENTATION)	
, ,	0.7
Assessment of Students in Activities of Discuss Online Using Machine Learning	87
Challenges Faced by Students in Becoming Digitally Fluent Amidst Covid-19 Pandemic: a Case Study of Uitm Pahang; a Public University in Malaysia	88
Developing English Language Curricullum for Sharia Tourism Department	89
Development of Evaluation Tools Based on Android App on Electricity Engine Practicum Courses in Universitas Negeri Malang	90
Learning Media Innovation for Early Childhood Based on Augmented Reality	91
Learning Media for Vocational High Schools based on EPUB Contains Problem Based Learning to Increase Learning Independence in	
Computer Systems Subjects	92
She's A Support System: Peer Assessment in Cooperative Learning Asynchronous Classroom in Efl Context	93
Utilization of Interactive Multimedia to Improve The Reading Ability of Students with Mild Mental Retardation	94
Utilization of 3D Exploded View for Practice Automobile Brake System	95
PROGRAM SCHEDULE	96
PARALLEL GROUPS	98

ABSTRACT OF KEYNOTE SPEAKERS

Assessment Principles that Every Teacher Should Understand

Stuart Kime Evidence Based Education, United Kingdom stuart@evidencebased.education

Abstract— Effective assessment is one of the most powerful tools available to any educator. From diagnostic quizzing to inform moment-by-moment interactions with students, to standardised testing to compare achievement across cohorts, assessment is central to the decisions that teachers, leaders and students make each and every day. But the true power of assessment lies in the selection and implementation of 'best bet' strategies and techniques – the right tools for the right job. To make these selections and realise the power of assessment, an understanding of key aspects of assessment theory – purpose, validity, reliability and value – can be helpful for educators. In this talk, Stuart will connect assessment theory to assessment practice in the classroom, and offer examples of how teachers and leaders around the world are adopting more evidence-informed approaches to it.

A Vision of Assessment and Evaluation on Online Learning in the Post COVID Era

Weishen Wu Da-Yeh University, Taiwan wsw@mail.dyu.edu.tw

Abstract-- This speech starts with a review of remote teaching and learning states since the COVID-19 breakout. Taking Taiwan experience as an example, several issues of assessment and evaluation that emerged in remote teaching are discussed. To cope with the problems, multiple interrelated factors are considered. One of the solutions is with the help of information technology, so what will assessment and evaluation look like in the digital era? Especially, how artificial intelligence (AI) is bettering remote assessment and evaluation. The rapid development of AI-powered assessment or evaluation systems is briefly introduced. Such disruptive innovations not only release teacher's burden but promote students responsible for their own learning. Perhaps, it flips the current examination system. Looking ahead to post COVID-19 pandemic, blended learning may become the new normal of school education. A new paradigm for remote assessment and evaluation in school education is likely to replace the traditional models. To meet the future of assessment and evaluation on e-learning, a collective responsibility sustained by stakeholders is proposed. Some implications for future research are addressed.

Assessment in the Technology Age: Purposes, Consequences, & Infrastructure

Gavin T. L. Brown The University of Auckland gt.brown@auckland.ac.nz

Abstract-- The current international pandemic has precipitated great in using technology to evaluate learning and quality assure assessments. Administrative purposes (e.g., scholarship awarding, graduation, and certification) have different expectations than formative, diagnostic, or educational uses of assessment. Teachers and learners need assessment to identify strengths and weaknesses and resources for improved outcomes; something quite challenging for total score and rank order reporting. This tension between summative and formative expectations challenges what technology needs to do to appropriately assess learning. Related to these contrasting purposes are the consequences attached to assessment results. While society is relatively relaxed about the consequences that students experience for performance (e.g., Grade A or Fail, etc.), using such information to judge the value of educational institutions or teachers has generally proven a failure. Assuring the authenticity or validity of performance in online assessment through online proctoring can be invasive of privacy and inaccurate. Thus, establishing the correct level of consequence for what may be a technological failure is important. Rapid deployment of assessment technologies depends on a robust infrastructure and equitable access and opportunity. Many societies have not established robust broadband and hardware provision for all--computer assessments in such contexts are fundamentally biased.

In this talk, I will report how New Zealand developed and deployed, first a computer assisted and then fully online, testing system of reading, writing, and mathematics for use in compulsory schooling. The system supports diagnostic, formative purposes in graphical reports that identify who needs to be taught what next. At the same time, the system provides robust normative information related to curriculum expectations and grade norms so that accountability requirements can be met. These lessons speak to challenges facing higher education in an era of pandemic.

U-Learning: Rethinking Assessment for 21st-Century Learners

Mohamad Fadhili Yahaya Universiti Teknologi Mara Kampus Arau, Cawang Perlis, Malaysia

Abstract-- As the world becomes more volatile, uncertain, complex and ambiguous (VUCA), the 21st century generation has to be equipped with the ability to strive for the challenges. The digital transformation resulting from the continuously new-found technologies and the surge of the Covid-19 pandemic are evidence of how VUCA the world is. The latter has forced the educators to find ways in exploring education, unlike what they have commonly practised. To ensure the learning is not disrupted during the pandemic when physical classrooms are closed, educators have to manipulate the available resource and experiment with existing technologies so that learning and teaching occur regardless of time and place. The approach or strategy in which classes can be conducted anytime and anywhere is known as ubiquitous learning or u-learning. Nevertheless, teaching and learning are far from complete if they are not accompanied by assessment. Some educators, as well as researchers, even classify assessment as learning and teaching. Due to this belief, this paper focuses on assessment as part of ubiquitous learning. The aim is to explore whether the existing assessment prepares the 21st century generation for their future. Specifically, the objectives of the paper are two folds: first, describe the current trend in publication on assessment and u-learning, and second, suggest future assessment for 21st-century learners. The paper will begin by discussing the challenges in the assessment of 21st-century learners. This is followed by discussions on the publication trend of research on assessment and the future of assessment for 21stcentury learners. Pedagogical and research implications will also be discussed.

Visual Game Smoking Awareness using Design Thinking for Acceptable Testing Kids Education

Ashar, Megan Karuna, Harits Ar Rosyid
State University of Malang, Indonesia
muhammad.ashar.ft@um.ac.id
Ateeq Rahman
Jawaharlal Nehru Technological University, Inida

Abstract-- Visual Game Smoking Awareness is an educational media that provides easy delivery of information about the dangers of smoking and the effects of smoking. Iterative process to collect ideas and ideas in the development of Visual Game Smoking Awareness using Design Thinking method. To ensure that the Visual Game Smoking Awareness is suitable for use by children, interface testing is carried out using a system usability scale—instrument. Testing using the SUS method has been carried out in a structured and accurately measured manner using 10 questions as a benchmark that underlies the testing of children's education that influences the decision not to smoke or to continue smoking. The test results obtained a value of 81.0 which means that the Visual Game Smoking Awareness is accepted and is included in the B and A grade categories with an excellent rating. Thus the Visual Game Smoking Awareness deserves to be used by users as a media or educational game about the dangers of smoking behavior for children in Indonesia.

Keyword: Visual Game, Design Thinking, System Usability Scale, Smoking Awareness

ABSTRACT OF SPECIAL SPEAKERS

Learning Innovation: Challenges and Hopes During The Pandemic

Suseno Amien
University of Padjadjaran, Indonesia
suseno@unpad.ac.id
Any Budiarti
University of Pasundan, Indonesia

Abstract— Learning innovation is an activity that must be done continuously. Basic aspects that must be considered are Course Delivery, Learning Feedback, Assessment, Knowledge mastery and re-discovery, Assuring competency/learning outcome. Especially during the pandemic, these aspects should be paid more attention because the demands to organize the teaching learning process are carried out online. Moreover Lecturers plays an important role in exploring the creative potential of themselves and their surrounding. Assessment and the link and match between theory and practice must be able to realize life skills to meet the demands of life.

Keywords— Innovation, Learning, life skills, online, pandemic

ABSTRACT OF INVITED SPEAKERS

An Empirical Study of Enhancing Creative Thinking and Collaboration Skills Through ILC3 Learning Model

Erlia Narulita Universitas Jember erlia.fkip@unej.ac.id

Abstract-- This article describes a new learning model in biotechnology learning. The proposed model was designed while considering the development of 21st century skills using learning models that can enhance creative thinking and collaboration skills. Using a mixed-method (qualitative and quantitative) approach, this study aimed at identifying the effect of the Identify, Literature Review, Construct, Create, and Communicate Learning Model implemented on Biology and Natural Science undergraduate students. As an example, we illustrate the proposed data collection technique for the assessment of creative thinking and collaboration skills using a written test and observation data, respectively. Our proposed learning model developed students' creative thinking and collaboration skills in two classes with 113 participants who enrolled in a course in Biotechnology. The new model's effectiveness is confirmed by calculating the overall mean scores of creative thinking assessment in the Biology and Natural Science classes, which are 87.42% and 92%, respectively, with an excellent category. Similarly, the results regarding students' collaboration skills in the Biology and Natural Science classes showed the scores of 84.06% and 84.94%, respectively, also with an excellent category. Our findings reveal that students' creative thinking and collaboration skills can be developed by using the Identify, Literature Review, Construct, Create, and Communicate learning model. The model can thus be used for enhancing other 21st century skills, such as critical thinking and communication skills, among others.

*This study published on Journal of Southwest Jiaotong University, 55 (4): 1-10, August 2020

Embracing Uncertainities: A Collaborative Ethnographic Exploration of Emergency Remote Teaching at Higher Education During The COVID-19 Pandemic

Latisha Asmaak Shafie
Universiti Teknologi MARA Cawangan Perlis, Malaysia
ciklatisha@uitm.edu.my
Rozilawati Mahadi
Universiti Malaysia Perlis (UniMAP), Malaysia
Aidura Aiyub
Kolej Matrikulasi Perlis, Malaysia

Abstract— The COVID-19 pandemic causes significant changes to traditional higher education institutions as language educators to shift to emergency remote teaching using online platforms. In addition, language educators are expected to assess their students via online platforms. Using a collaborative autoethnography, this paper analyses our experiences as three language educators at three Malaysian higher education institutions on emergency remote teaching during the COVID-19 pandemic. Resilience theory was used as the framework for our study. Resilience describes our ability to change and adapt to challenging situations. We were experts in our traditional face-to-face classrooms, yet novices in online teaching contexts. Our self-reflective field notes that were supplemented by our social media posts from April 2020 to April 2021 were analysed using thematic analysis that focussed on emergency remote teaching during the COVID-19 pandemic. We acknowledge that as educators, we used multiple strategies and played various roles in engaging our learners in effective online learning and conducting assessments. We offer suggestions that educators give emotional and academic support to our learners. Collaborative autoethnography is found to be an effective research method to present and overcome challenges during emergency remote teaching in encouraging effective learning and assessments.

Keywords— collaborative autoethography, language educators, emergency remote teaching, learning, assessments, pandemic

Improving Students' Achievements in Online Learning using Cumulative and Sustainable Concept Mapping

Didik Dwi Prasetya

State University of Malang, Indonesia., Hiroshima University, Japan didikdwi@um.ac.id

Abstract—Concept maps are useful graphical knowledge representation tools for teaching, learning, and assessing. They have been employed for a long time widely at various levels of education. The concept map has been shown to have a positive effect and facilitate meaningful learning. Although there have been many studies that discuss concept maps, there is still little information that expands concept mapping activities. Concept mapping extension provides learners with the opportunity to review initial ideas and connections, eliciting missing ideas and relationships, adding new concepts and links, and revising knowledge integration. This study introduces the Extended Kit-Build (EKB) design, a cumulative and sustainable concept mapping, to improve student's learning outcomes. The EKB employs a recomposition Kit-Build (KB) framework and integrates the open-ended technique into a continuous mapping activity. Recomposition is an essential learning activity that encourages learners to understand the teacher's understanding through map reconstruction. The experimental results show that cumulative and sustainable concept mapping encourages students to improve their understanding and produce a better knowledge structure.

Social Media as Learning Tools: Perceptions of Students in a Malaysian Public University

Razlina Razali, Farah Lina Azizan Universiti Teknologi MARA, Perlis Branch, Arau Campus, Malaysia razlinarazali@uitm.edu.my, farahlina@uitm.edu.my

Abstract-- The ongoing Covid-19 pandemic has forced the teaching and learning process in most higher learning institutions to be conducted through online distance learning. Consequently, lecturers have to think of creative ways of disseminating knowledge to students during these unprecendanted times. One of the mediums that can be considered by lecturers is social media. The current study aimed to investige attitudes of Malaysian university students towards the use of social media for learning activities. A total of 100 undergraduate students from a public university in Malaysia were involved in this study. Data were collected using an online survey. Results showed that students were active on social media in particular WhatsApp application. In the main, students used this application for educational purposes. Overall, students had positive attitude towards the use of social media for learning. This study also reported the challenges faced by students in using social media for learning as well as suggestions for lecturers in employing social media in their teaching and learning process. The paper argues that social media provides a good platform to promote interaction and engagement between lecturers and students.

Strengthening Learning Innovation with Digital Infusion on Small Medium Enterprise Empowerment During the COVID-19 Pandemics: Case Study of SME Internships in East Kalimantan

Miftakhur Rohmah and Anton Rahmadi PUI-PT Oktal, Universitas Mulawarman arahmadi@unmul.ac.id

Abstract-- SMEs are the backbone of Indonesian economics even in the COVID-19 pandemics era. However, SMEs are a very diverse term, starting from individuals, street vendors, well established, and ready to export companies. For SME businesses to continue to exist and improve their performance from time to time, efforts are needed to learn knowledge related to entrepreneurship, marketing, cooperatives, etc. SMEs have advantages compared to large businesses, including flexibility, adapting quickly to market changes, and absorbing relatively large unskilled labor. Most SMEs produce consumer goods and services with low elasticity of demand for income. With most of Indonesia's population having low education, the ability of SMEs to absorb unskilled labor is beneficial in creating jobs. In 2020, innovation in developing the SMEs in East Kalimantan began with strengthening the SME institution, empowering human resources, and assisting SMEs in completing regulatory submission documents. The coaching process consists of 4 sessions, namely: (1) Digital Financial Management Session, which introduces the recording improvement process (assets, debts, inflows and outflows, low-inflation investments such as gold installments); (2) Production Management Session explaining raw material selection, raw material storage, washing and waste disposal, hygienic/safe work processes, employee health, environmental health, packaging and packaging labels, distribution, returns, and corrective actions; (3) Digital Sales Management Session which concentrates on introducing Product Quality Improvement (organoleptic improvement, organoleptic stability, improvement of packaging design and size, product positioning determination, digital marketing strategy); and (4) Regulation Introduction Session aims to introduce the management process licensing (requirements for P-IRT certificate, halal, CPPOB/GMP, SNI, etc.). The undergraduate students were deployed to assist all the SMEs empowerment curriculum. As a result, the university gains output, and outcomes from this program, i.e., increased partnerships, publications, and industrial CSR collaborations.

Video Blogging (VLOG) as a Learning Method for Solving Environmental Problems in Ecology Course during The Covid-19 Pandemic

Rida Oktorida Khastini
Depaertment of Biology Education, Faculty of Teacher Training and Education,
University of Sultan Ageng Tirtayasa
rida.khastini@untirta.ac.id

Abstract-- The complex environmental problems caused by human activities presenting many disasters, such as forest fires, floods, and landslides. Learning environmental themes through a problem-solving approach is one way to solve this obstacle. During the Covid-19 Pandemic, however, the learning process is not conducted directly face-to-face between teacher and students, learning techniques are required to fulfill the learning objectives of environmental caring. A vlog (video blog) project that combined images, audio, video, and text to convey ideas to the public is one method that can be used to solve environmental issues. Vlogs in education can help students enhance their communication skills through telling stories, as well as their visual literacy and problem-solving abilities. A correlational method was conducted in this study to determine the relationship between students' capacity to address environmental problems and their creativity in producing vlogs. About sixty students enrolled in the even semester 2020/2021 on ecology course represented as research subjects. The student's vlog product and the environmental problem-solving skill were evaluated using a creative product assessment sheet, and a subjective test respectively. The results showed that most of the students were able to make problem-solving vlogs. The correlation findings revealed a positive correlation between students' ability to create creative vlog products and their ability to solve environmental issues. Consequently that during the Covid 19 period, this model can be proposed for use in learning.

Keywords: covid 19 period, environmental problem-solving, vlog education project.

ABSTRACT THE 5TH ICLI 2021 AUTHORS (ORAL PRESENTATION)

Anak Muslim Hebat Boardgame as Al-Qur'An Learning Media for Children

Andreas Syah Pahlevi, Yusuf Hanafi, Afwan Hariri Agus Prohimi, Moh. Fauzan State University of Malang, Indonesia andreas.syah.fs@um.ac.id

Abstract— The development of boardgame as a learning medium for children to know the exemplary story of the Prophet. In addition, children can learn to recognize hijaiyah letters and short letters in the Alqur'an. The advantage of this game is to develop children's knowledge in cognitive, psychomotor and affective aspects. This innovation is designed using a personalized learning approach. The aim of this innovation is to develop a board game for learning Alquran—children. Three stages are used for the development of this boardgame, namely 1) the pre-production process, namely activities to finalize ideas using the design thinking method. 2) Determination of the product development method using the AIDAS method and continued product validation by experts. 3) The process of production results and validation begins to be marketed on a micro scale. In its implementation, the Nine Core Of Marketing method is used. After doing all the existing processes, the Great Muslim Kids boardgame is produced which contains the main game board, challenge cards, question cards, hourglass, pawns, scoreboard, spinner, guidebook and packaging. The game content includes material from the apostles' exemplary stories, introduction to hijaiyah latters, recognition and memorization of letters in Al-qur'an.

Keyword— Anak Muslim Hebat, Boardgame, Learning Al-qur'an

Analysis Of Disease Distribution and Vulnerability Of Dhf In Palembang City

Cipta Estri Sekarrini, Sumarmi, Syamsul Bachri, Didik Taryana State University of Malang, Indonesia ciptaputri 123123@gmail.com

Abstract— This study aims to determine the distribution and level of susceptibility to dengue fever in the city of Palembang. Analyzing the distribution of DHF using secondary data on the number of DHF cases which is then described and described in the form of a map. In addition, analyzing the level of vulnerability using three parameters, namely population density, humidity, and rainfall which are then scored and overlaid using GIS. The results showed that the distribution of DHF cases in Palembang City in 2015 the highest cases of DHF occurred in Sematang Borang District with 120 cases, the lowest DHF case was in Ilir Timur District 2. In 2016 the highest cases of DHF occurred in Ilir Timur District 1 with a total of 120 cases, while the lowest was Ilir Timur 2 with 19 cases of DHF. Ilir Timur 1 became the District that had the most cases in 2017. While the few in Plaju District with 19 cases. The number of dengue cases in 2018 again occurred in the highest number in Ilir Timur 1 District with 158. While the lowest occurred in West Ilir District. 1 with 19 cases. The highest dengue cases occurred in Ilir Timur 1 District in 2019 with a total of 200 cases. While the lowest DHF cases were in Ilir Barat 1 District with only 15 cases. The level of DHF vulnerability in Palembang City consisted of medium and high levels of vulnerability. For the high level of vulnerability, it is spread in the Districts of Gandus, Ilir Barat 2, Ilir Timur 1, Ilir Barat 3, Kemuning, Plaju, Seberang Ulu 2 and Sematang Boring.

Keywords— DHF, GIS, Scatter, vulnerability

Analyze of Enhancing Student's Understanding of Concepts in Learning Cycle 7E Integrated with Web-Based Formative Assessments

Mahda Yulia Astary, Erni Yulianti, Vita Ria Mustikasari State University of Malang, Indonesia vita.ria.fmipa@um.ac.id

Abstract— Assessment should not only be carried out when the learning ends (or assessment of learning) but also during the learning process through assessment for learning and assessment as learning approaches. These approaches can be achieved by integrating formative assessment during the learning process. Formative assessments provide information about students' strengths and weaknesses in learning by giving feedback. Giving immediate feedback is very necessary to close the gap in students' concepts. Giving a test with immediate feedback can increase students' learning interests and provide reinforcement and improvement in students' understanding of concepts. This research aims to find out the increased junior high school students' concept understanding in science learning which is integrated with web-assisted formative assessment on materials of vibrations, waves, and sounds. This research was conducted in VIII-C Class SMPN 1 Malang, the academic year of 2018-2019. The research design used was a mixed method with an embedded experimental mixed method. Quantitative data is in the form of pretest and posttest scores. Qualitative data are the results of observations during the learning process, answers to worksheets, and the results of interviews with students. On the other hand, quantitative data analysis includes the Kolmogorov Smirnov test, paired t-test, N-gain, and d-effect size. Qualitative data analysis is data reduction. From the result of the d-effect size test, it obtained a score of 2.25 (high category), and N-gain indicated the score of 0.63 (above the medium category). The study indicated that students' understanding of concepts has improved through science learning integrated with web-assisted formative assessment.

Keywords— Understanding of Concepts, Web-Based Formative Assessments, Learning Cycle 7E

Analyzing Student Perform Through Predictive Analytic in Moocs Learning Environment

Saida Ulfa, Agus Wedi State University of Malang, Indonesia Izzul Fatawi Institut Agama Islam Nurul Hakim, Indonesia Rex Bringula University of The East, Philipphine

Abstract— E-learning has now become a common method, especially in higher education during the Covid-19 pandemic. One of the obstacles faced by instructors through this method is the difficulty of observing the behavior of learning participants directly, even though the learning is presented synchronously, moreover learning mode that is presented asynchronously. However, currently this problem can be overcome by utilizing the field of Educational Data Mining (EDM). Some features or types of data sets that are processed to produce important information from a learning management system. This type of dataset is divided into three categories, namely: 1) Demographic features such as gender, age, technology infrastructure owned, 2) Academic background features such as education level, learning level, and learning achievement, 3) Behavioral features. Predictive Learning Analytics (PLA) is one of the commonly used techniques in the field of learning analytics and EDM, through this technique it provides instructors with understanding to predict the learning success of participants and how to find problems faced by them. This research focused on activities that can describe learning behavior, learning attitudes, and learning involvement of participants on the MOOCs platform.

Assessing Speaking Skill to Indonesian High Schoolers who Studied English as a Foreign Language in Remote Language Learning Context

Sintha Tresnadewi
State University of Malang, Indonesia
Yosinta Christie Setiabudi
SMAK Kalam Kudus Malang
sintha.tresnadewi.fs@um.ac.id

Abstract—Assessing productive skills, particularly speaking skill, to Indonesian high schoolers who study English as a foreign language (EFL) in remote language learning context needs a special effort and creativity. In a face-to-face class interaction, speaking assessment can be done in many different ways like reading aloud, monologue, dialogue, oral presentation, oral interview, group discussion, or role play. In remote language learning context, however, not all aforementioned tasks can be easily done since online learning does not support natural speaking environment while, obviously, speaking is supposed to be spontaneous and natural as in real life. Another challenge of speaking assessment in remote language learning context is how to make the prompt or task clear, focused, intelligible, familiar, and of the test takers' interest so they will easily grasp the task, engage, and, ultimately, demonstrate their best. The purpose of this article is to share a good practice of an online speaking test which was applied to a group of Indonesian 10th grade high schoolers who studied English. The teacher assigned a contextual, interesting task in a clear, focused prompt while the aspects to evaluate were clearly given as well. By having the thoroughly-prepared prompt, the test proved to be valid and reliable.

Keyword— English as a foreign language, productive skill, remote language learning, speaking skill, test prompts

Assessment in Character Education: The Praxis of Character Education in Mataraman Families

Nur Wahyu Rochmadi State University of Malang, Indonesia nur.wahyu.fis@um.ac.id

Abstract— Assessment in character education is a dilemma, it can be done but cannot be accounted for its efficacy. Therefore, always differences of opinion about assessment in character education. As an educational activity, there must be a justification for the level of attitude capability, such as the level of the attitude aspect of Bloom and Kratwall or others, but how to account for its efficacy. The Mataraman families is known to have firmness in the praxis of character education for the younger in the family. Starting from the practice of character education for the Mataraman family, identificated of assessment patterns in character education was carried out. The purpose of this study is to find a pattern of assessment in character education. The research was carried out with a descriptive qualitative research design. The research subjects are community leaders, families and other parties who interact with the Mataraman families. Data was collected through observation, interviews and documentation. The data were analyzed by the interactive model. Research findings: a patterns of assessment in the praxis of character education in Mataraman families as: (1) implemented integrated into the praxis of character education in the family; (2) the goal is for children to behave in accordance with Mataraman values; (3) the form of assessment in character education use of language, words, volume, intonation, gestures, cue and behavior, and punishment; (4) assessment is intended not to justify, but to provide guidance; (5)Based on these findings, it is suggested: (1) to using the assessment pattern in the character education of the Mataraman family as a model in the evaluation of character education; (2) practicing the assessment pattern in the character education to character education activities at school.

Keywords— Assessment, education, character

Blended Learning Model "Gawi Manuntung" Based on Local Wisdom to Improve Critical Thinking, Creative Thinking, Problem-Solving, Analytical Thinking, and Logical Thinking

Akhmad Riandy Agusta
Universitas Lambung Mangkurat, Indonesia
riandy.agusta@ulm.ac.id
Tasdin Tahrim

¹Institut Agama Islam Negeri Palopo, Indonesia
Harizahayu Harizahayu

³Politeknik Negeri Medan, Indonesia
Dina Chamidah

⁴Universitas Wijaya Kusuma Surabaya, Indonesia

Abstract— Learning during the COVID-19 pandemic tends to be less developed students' skills because only be done online. Based on the facts, many elementary school teachers in South Kalimantan are experiencing difficulties because there are limited models and strategies to implement learning. This reason encourages developing the GAWI MANUNTUNG learning model as a learning model that develops local wisdom. The purpose of this study is to describe the effectiveness of GAWI MANUNTUNG learning model to improve the critical thinking, creative thinking, problem-solving, analytical thinking, and logical thinking of elementary students in Banjarmasin. This research uses a type of development research developed by Borg Gall consisting of 10 stages. The data was analyzed using Aiken's V formula to determine the feasibility of the model and to analyze the model's effectiveness against bound variables through the One-Sample t-Test and Hotelling's T2 test using SPSS 21 assistance. The research sample was 40 students of SDN Sungai Miai 7 Banjarmasin. The results showed reliability 0.91, can improve Critical Thinking (CT) 85%, Creative Thinking (CV) 80%, Problem Solving (PS) 85%, Analytical Thinking (A) 85%, and Logical Thinking (L) 80% and contribute to CT 16.3%, CV 13.6%, PS 14.5%, A 16.3%, L 15.3%.

Keywords— Model Gawi Manuntung; Critical Thinking; Creative Thinking; Problem Solving; Analytical Thinking; Logical Thinking; Local Wisdom

Competency Development of Islamic Education Lecturers with Asynchronous Learning During The Covid 19 Pandemic: Preliminary Research

Refika
STAI Diniyah Pekanbaru, Indonesia
refikaaja87@gmail.com
Adirasa Hadi Prasetyo
STKIP PGRI Sumenep, Indonesia
Wahira
Makassar State University, Indonesia
Apriani Riyanti
Binawan University Jakarta, Indonesia

Abstract— Islamic education courses are compulsory subjects that must be taken by all Muslim students. The way of presenting and implementing Islamic education courses during the COVID-19 pandemic must follow the latest trends and be technology-based. Therefore, all lecturers of Islamic education must improve their competence by participating in training and webinars on learning strategies, designs, models and innovations. This is important to do so that students remain comfortable studying Islamic education courses during the COVID-19 pandemic. A survey at the end of June 2021 was conducted to find and collect data on the procedures for Islamic education lecturers to develop their professional competencies in relation to strategies, models, designs and learning innovations in the East Java region. And the opportunities and obstacles faced when doing learning from home set by the Government. The conclusion of this research is that Islamic education lecturers have done various ways to develop their professional competence by participating in various trainings and webinars with the theme of education and learning to provide maximum learning services to students while working from home.

Keywords—Competency Development; Asynchronous Learning

Conceptual Development of Cybercounseling Skills Training Design for Middle School Guidance and Counseling Teachers

Nur Hidayah, M. Ramli, Fitri Wahyuni, Husni Hanafi State University of Malang, Indonesia nur.hidayah.fip@um.ac.id

Abstract— The application of the cybercounseling model is basically a technology integration need that must be pursued in the era of the Industrial Revolution 4.0. In this new normal era are in accordance with the implementation of cybercounseling in the provision of counseling services. Limited access and skills of guidance and counseling teachers are the main obstacles in providing cybercounseling services. In addition, several online counseling platforms that have been circulating in the market are generally available as paid application access. The research and development method adopts a 4D conceptual research and development method consisting of Define, Design and Development and Disseminate Focus. Content analysis is the main form of analysis in product development construction. The results show the form of training procedures consisting of reflective discussions and 4 stages of experiential learning, and the media for cybercounseling training based on the Google platform. The training procedures and media have theoretical accuracy to be an alternative in improving the cybercounseling skills of junior high school counseling teachers. Practical validity testing is a suggestion for further research to obtain evidence of the effectiveness of the product in improving the cybercounseling skills of junior high school counselors.

Keywords— cybercounseling skills, counseling online, school counselor

Conceptual Development of Helper's Assessment Skills Training Design on Inmate's Resilience in L-Sima

Nur Hidayah, M. Ramli, Lutfi Fauzan, Mohamad Amin, Husni Hanafi State University of Malang, Indonesia nur.hidayah.fip@um.ac.id

Abstract— The prisoners life in correctional institutions tends to get negative stereotypes from society in general. This condition became a burden for the inmates entering their new life situation. They (WBP) will experience stress, depression, and deviant behavior and violations. The ability to surviving their problems and difficulties is required. The resilience of the inmates will make them survive to avoid feeling helpless and hopeless. Based on the explanation of these conditions, the helpers at the Penitentiary Malang (L'SIMA) need to have skills in measuring the resilience condition of the inmates. This study aims to conceptually develop a resilience assessment skills training design for helpers at L'SIMA. This research was conducted using 4D research and development methods with Define Focus, Design and Development Focus, and Disseminate Focus. The main analysis in this study uses form content analysis. The development results are manifested in the design of training procedures and forms of psychological assessment in measuring the resilience of WBP. The design has been developed based on the experiential learning model to provide real and hands-on experience in developing the helpers' skills in measuring the resilience of WBP. Practical testing recommendations are given to find evidence of product effectiveness.

Keyword— Assessment Skills, Resilience, prisoners, helpers

2

Conceptual Development of Online Psychological Assessment Training Design for Guidance and Counseling Teachers on The Academic Life of High School Students

Nur Hidayah, Lutfi Fauzan, Fitri Wahyuni, Husni Hanafi State University of Malang, Indonesia nur.hidayah.fip@um.ac.id

Abstract— Assessment activities in guidance and counseling are fundamental activities that play a role in students' self-understanding, programming to placement and individual student planning. Currently, guidance and counseling teachers have limited instruments, interactions, and inappropriate analysis process of data. In this new normal era, students' academic life experiences turmoil that can trigger various conditions of problems. This study aims to develop the online psychological assessment skills training for guidance and counseling teachers. The research method used is conceptual development research. The research procedure uses 4D development steps (Define Focus, Design and Development Focus, and Dissemination Focus). The study results explain (1) the online psychological assessment skills training procedure using the reflective-discussion method and continued using 4 stages of experiential learning, and (2) the construct of online psychological assessment media based on the Google platform. Reflective-discussion activities and experiential learning become procedures for providing direct experience and training to improve online psychological assessment skills that counselors can have on the free google platform. This conceptual development product in the form of a training design prototype requires testing and validation to practically prove its effectiveness in improving the psychological assessment skills of high school guidance and counseling online teachers.

Keyword— Psychological assessment, academic life, online assessment

Creative Conjecture: Abductive Reasoning to Generate Idea in Algebra

Indriati Nurul Hidayah, Santi Irawati, Mohammad Agung State University of Malang, Indonesia indriati.nurul.fmipa@um.ac.id

Abstract— Innovation in mathematical learning can be done by providing some problems that stimulate students' creativity in thinking. Non-routine problems that facilitate new ideas can be given in the learning process. When solving mathematical problems, students do reasoning, and reasoning that stimulates creativity is abductive. In abductive reasoning, students are asked to make conjectures based on facts (surprising facts) and rules needed to solve problems. The conjectures made by students can vary; this is what will stimulate students' creativity. The participants in this study were 4th-semester mathematics students taking an Introduction to Rings course at Universitas Negeri Malang. The learning is carried out online using learning videos, discussion group online, and google meet. The participants solve two nonroutine problems that facilitate generating new ideas. This study aims to analyze the process of making conjectures by students based on abductive reasoning. Students make three different conjectures with their respective processes; even some students generate new ideas, which, although not complete, but creativity have emerged.

Keywords— Abductive reasoning, conjectures, creative thinking

Developing Digital Comic Media: A Platform For Online Course

Habiddin Habiddin, Muhammad Ashar, Ahmad Hamdan[,] Khaidir R Nasir State University of Malang, Indonesia PUIPT Disruptive Learning Innovation Muhammad.ashar.ft@um.ac.id

Abstract— The rapid development of science and technology in the 21st century demands students (both school and university students) to hold sufficient skills, including critical thinking and problem solving, for competing globally. Educational systems are responsible for promoting the skills through the teaching and learning experiences, including teaching material and learning media applied in the class. This paper highlights the development of mobile apps-based digital comic media in social learning that can be integrated into a personalized based online learning. The digital comic media present an interactive science knowledge platform in the form of digital comic media enriched with Augmented reality technology. The app has been tested to 20 students during the emerging of the Covid-19 pandemic and showing good acceptance. This implies that digital comic media is of value to be used and applied in online learning.

Keywords—Personalized learning, digital comics media, Augmented Reality

Developing Ma-Prscb Competency – Based E-Learning Module for Postgraduate Research Students

Muhammad Aiman Arifin Universiti Teknologi MARA, Perlis Branch, Arau Campus aimanarifin@uitm.edu.my

Abstract— Competency-based assessment (CBA), as one of the main functions in human resource, has attracted many researchers and practitioners in multidisciplinary field. Despites the focus have been widely used for many profession in the world of work, it is also used for different perspectives including among postgraduate students who need to possess required knowledge, skills and abilities to complete their study. In this context, tools such as competency module can be utilized to prepare and enhance postgraduate research student's level of competencies in the future. Based on the call to include technology in education and the growing demand for online instruction, self-regulated e-learning modules are an innovative teaching strategy to help improve postgraduate research student success and outcomes. Thus, the purpose of this study is to discuss the procedures and preliminary results of need analysis towards developing a competency based e-learning module for postgraduate research students namely Ma-PRSCB e - learning module. The researcher developed an e-learning module using the theory of self-regulated learning. This module will be designed to be an asynchronous, stand-alone, self-pace adjunct to better prepare postgraduate research students. The main outcomes of this study are expected to guide ministry of education, higher educational institutions as well as postgraduate research students regarding the significant competency elements, which is vital to ensure students are more competent throughout the study journey.

Keyword— Competency-based approach, E-Learning Module Development, Postgraduate Research Students, Need Analysis, research procedures

Development of *Android*-Based Interactive Multimedia on Interaction of Living Things with The Environment Topic for Seventh Grade Junior High School to Improve Student's Learning Motivation

Dr. Munzil, S.Pd., M.Si., Yessi Affriyenni, S.Pd., M.Sc., Kiki Kharismaliyansari State University of Malang, Indonesia munzil.fmipa@um.ac.id

Abstract— Attractive learning media about the interaction of living things with the environment is still needed because students' learning motivation of the topic is still relatively low. The low motivation to learn can be caused by several things such as the used learning materials are less attractive, the teacher still applies the lecture method, the lack of use of interesting learning media, and the numerous concept to learn in the topic so that students tend to do more memorizing more but do not understand well. If this habit is maintained, it will affect student learning outcomes. To overcome these problems, it is necessary to develop an interesting learning media so that students' learning motivation on the material can be increased. Hence, this research and development aims to produce learning media that is valid and suitable for use. The development carried out applies the development model of Lee and Owens (2004). The average percentage of media validation is 91%, of material validation is 95%, of the feasibility test is 96% and of the readability test is 91%. The average percentage obtained overall is 93%, so it can be concluded that this learning media is valid and feasible to use.

Keyword— Android based Interactive Multimedia, Interaction of Living Things with The Environtment, Learning Motivation

Development of Audio Mixer Trainer Equipped Power Amplifier for Audio Video Engineering Courses in Electrical Engineering Educational Study Programs

Deni Harianto, I Made Wirawan, Muladi State University of Malang, Indonesia eni23harianto@gmail.com

Abstract— The curriculum of the S1 Electrical Engineering Education Study Program, Faculty of Engineering, State University of Malang 2018 contains Audio Video Engineering Courses in the Instrumentation and Control Concentration Working Behavior Group. The Audio Video Engineering course requires students to understand and apply skills in the installation and analysis of audio device processing. One of the audio processing tools that must be learned is an audio mixer. Based on the results of interviews conducted, the audio mixer trainer in the laboratory is still not available. Meanwhile, the importance of studying audio mixers in the Audio Video course is to practice the ability in the process of mixing audio from several sound sources, one of which is during live music concerts. So that the absence of an audio mixer trainer hinders the lecture process, especially to develop student motor skills. Based on the problems above, the trainer that will be developed is an 8 Channel Audio Mixer Trainer equipped with a Power Amplifier. The objectives of this development are: 1) Designing and developing learning media in the form of an 8 Channel Audio Mixer Trainer along with a jobsheet for Audio Video Courses and 2) Testing the feasibility of learning media products in the form of an 8 Channel Audio Mixer Trainer along with jobsheets for Audio Video Courses. The development model used in this development was adopted from the Sugiyono development model. The results of product validation by expert 1 were 95.31%, and expert 2 was 89.84%, with the results of product trials by 10 respondents obtained 88.70% and the results of trials using 18 respondents by 90.33%. Based on the results of expert validation and testing, it can be concluded that the 8 channel audio mixer trainer equipped with a power amplifier and jobsheet is very suitable for use in learning.

Keywords— Development, Trainer, Audio Mixer, Power Amplifier

Development of Assessment Instrument Through Quizizz for The 9th Grade Students at Smpn 44 Surabaya

Joko Slamet, Siti Fatimah, J. Priyanto Widodo STKIP PGRI Sidoarjo, Indonesia joko.slamet2801@gmail.com

Abstract— This study aimed to produce an assessment instrument that meets the eligibility criteria as the learning needs and to develop appropriate English learning materials for the 9th grade students at SMPN 44 Surabaya in the academic year 2020/2021. The research procedure was adapted from the R&D model refers to Gall, et al. (2003). The first step was conducting a needs analysis and the results were used to develop the syllabus. The syllabus was the guideline to develop the first draft of the materials in conducting the assessment through Quizizz. Then, the first draft was evaluated by a learning materials expert. The results of the materials evaluation were then analyzed through descriptive statistics and used to revise the first draft of the materials. The product of this study is the units of English learning materials as the assessment instrument. Based on the materials evaluation, the content, the language, the presentation and the lay-out of the materials of assessment are appropriate and is categorized as 'Good'.

Keyword— Development, assessment instrument, Quizizz

Development of E-Learning Based on Augmented Reality (AR) on Reductio-Oxidation Reaction Topic

Isnanik Juni Fitriyah, Yessi Affriyenni, Erti Hamimi State University of Malang, Indonesia isnanik.fitriyah.fmipa@um.ac.id

Abstract— The concept of electrochemistry is based on reduction-oxidation (redox) reactions and electrolyte solutions. Where this material is difficult to understand because the aspects studied include submicroscopic aspects. In the reduction reaction, an electron capture event occurs, while the oxidation reaction is an electron releasing event that occurs in the introductory medium in electrochemical cells. Augmented Reality is an application that combines the real world with the virtual world in two-dimensional and three-dimensional forms that are projected in a real environment so that it can help students better understand the material. This type of research includes research and development (R&D) using the 4D model with the stages of define, design, and develop. The product will be tested for validity through expert testing and field testing. If the validity test results in a percentage >50%, the product is declared valid.

Keywords— E-learning, Redox Reaction, Augmented Reality

Development of Edu-Kit Media for Entrepreneurship Learning Based on Gamification Model Toward Disruptive Education

Heny Kusdiyanti, Karkono, Sopingi, Indra Febrianto, Robby Wijaya, Nur Indah Agustina State University of Malang, Indonesia heny.kusdiyanti.fe@um.ac.id

Abstract— The current reality shows that entrepreneurship education is only a textbook without providing experimental learning to students. The current solutions have not been able to accommodate the needs of students, especially in the era of disruptive education which is developing massively. The absence of teacher participation in becoming a business simulation mentor further exacerbates the current problem in entrepreneurship education. So it is necessary to have an interactive learning media solution that can provide experimental learning and increase teacher participation in fostering students' entrepreneurial spirit. This study aims to develop gamification-based educational learning media that will be implemented in high school students to develop students' entrepreneurial spirit. This type of research is development research using the ADDIE (Analysis, Design, Development, Implementation, Evaluation) method by using a questionnaire to collect research data. After being implemented, gamification-based educational learning media succeeded in increasing student interest in entrepreneurship education as a provision for the growth of the entrepreneurial spirit in students. This learning media has also succeeded in increasing the activeness of teachers and students in the learning process that provides experimental learning to students. The collaboration between the gamification model and educational learning media is by the competency needs of students in the current era of disruptive education. Follow-up research is deemed necessary that focuses on digitizing gamification-based educational media that was developed without eliminating the activeness of teachers and students in learning.

Keywords—Disruptive education, edukit, entrepreneurship learning, experimental learning, gamification

Development of Virtual Reality-Based Learning Media on Chemical Bond Materials and Molecular Shapes for Grade 10th of Senior High School Students

M.Muchson, Ridwan Joharmawan, Asia Febriana, Rifqon Hakiki State University of Malang, Indonesia m.muchson.fmipa@um.ac.id

Abstract— The material in the form of molecules and chemical bonds is considered quite difficult by students. In addition, boring and non-interactive learning media make it less interesting for students to learn. To overcome this, the researchers developed VARITY (Virtual Reality Chemistry) learning media, which is an interactive learning application based on virtual reality technology with the topic of molecular shapes and chemical bonds. This study aims to conduct a media feasibility test and increase student interest in learning. The learning media design model used is ADDIE while the stages include assessment or analysis, design, development, implementation, and evaluation. Before the trial was carried out on 31 students of SMAN 1 Srengat, the experts first tested the validity of the product in terms of material and media by experts. The average percentage of product validity results in terms of material is 80.67% (very feasible), in terms of media 84.93% (very feasible) and from the test results of 81.71% (very feasible) so it can be said that VARITY learning media is very feasible to be applied in learning.

Keywords— chemical bonds, learning media, molecular shapes, VARITY

Development of Virtual Reality Content to Improve Social Skills in Children with Low Function Autism

Ahsan Romadlon Junaidi, Yovie Alamsyah, Nur Wagis Mulyawati State University of Malang, Indonesia aksanromadlon.fip@um.ac.id

Abstract— The autistic spectrum is a developmental barrier that affects the social skills, communication, and behavior of the sufferer. In general, compensatory services for children on the autistic spectrum are focused on social and communication skills. One of the media that can be used in this compensatory service is in the form of assistive technology, in this case virtual reality. This study aims to develop the content of virtual reality devices in order to develop the social skills of children with low function autism. The trial was conducted at SLB River Kids Malang. The virtual reality device development method used refers to the Borg and Gall development model. The test results show that there are various reactions in the respondents. Two out of three respondents show interest in the visuals they see, even though they have not been able to develop their social skills perfectly. This form of interest is marked by an observation process with a fairly long duration of virtual objects and the mention of virtual objects that are popular.

Keyword— low function autism; keterampilan sosial; realitas virtual

Disaster Education with Disruptive Virtual Reality Media for Social Character Development of Indonesian Children

Syamsul Bachri, Agusta Rahmat Taufani, Yudi Tri Harsono State University of Malang, Indonesia syamsul.bachri.fis@um.ac.id

Abstract— Indonesia is in one of the most active zones, there have been 34 major events that have the potential to cause a tsunami in the last 20 years. In 2018 to 2019 there were 3 tsunami natural disasters in Indonesia, namely tsunamis in the provinces of Banten, Lampung and Central Sulawesi. The total death toll in the tsunami disaster reached 3,754 people and the victims who suffered injuries amounted to 18,493 people. Factors that can cause these natural disasters to cause many victims, namely the lack of information and early warning that causes unpreparedness, and the inability to face the threat of danger. This fact makes the presentation of information about preparedness for natural disasters important, and the safety of the victims of the tsunami requires appropriate and fast assistance. This is important to do to prevent a greater impact on the victim. The development of virtual reality-based disaster education media that can be implemented online during a pandemic, either with access to website resources or in real-time digital disaster applications, is very necessary for people in Indonesia who have very low knowledge about disaster and how to handle it post-disaster or as a medium that provides knowledge and skills of the self-rescue process during a disaster and the post-disaster evacuation process.

Keyword— Disaster, Virtual Reality, Educational Media, Prototyping Model

Disruptive Learning Media Integrated E-Generator Practice System to Advance Self-Efficacy Learners Levels in Era of Education 4.0

Andika Bagus Nur Rahma Putra, Nurul Ulfatin, Azizatus Zahro, Mahfudi Sahly Subandi State University of Malang, Indonesia andika.bagus.ft@um.ac.id
Yee Mei Heong
Universiti Tun Hussien Onn Malaysia, Malaysia

Abstract— This study aims to: (1) develop disruptive learning innovations through the e-generator practice system; (2) testing the feasibility of disruptive learning innovation through the e-generator practice system; and (3) testing the effectiveness of disruptive learning innovations through the e-generator practice system to increase the level of student self-efficacy in the education era 4.0. This study uses the R&D method with the ADDIE model. Validation with two teams of experts (online learning media experts and learning software experts). Data analysis with hypothesis testing using SPSS 21.0. The results of this study include: (1) developing disruptive learning innovations through the e-generator practice system covering analysis, design, development, implementation, and evaluation; (2) the results of the product feasibility test validation are 97.5% (application display aspect), 89.3% (user benefit aspect), 92.5% (information novelty aspect), 90.7% (content aspect), 92.3% (ease of use), and 96.0% (competency attainment aspect); and (3) disruptive learning innovation through the e-generator practice system has been proven to be effective in increasing the level of self-efficacy of students in the education era 4.0 as evidenced by the results of hypothesis analysis.

Keyword— Disruptive media, self efficacy, education 4.0, learning media, educational innovation

Educational Communication Analysis: Bully, Facilitative, and Motivative in Indonesia Early Childhood Education

Eny Nur Aisyah, Hardika Hardika Universitas Negeri Malang, Indonesia eny.nur.fip@um.ac.id/ enynur.2020@student.uny.ac.id Harun Harun, Arif Rohman Universitas Negeri Yogyakarta, Indonesia

Abstract-- Educational communication conducted by educators at the early childhood education level becomes a milestone in the learning process of children. The purpose of this study is to analyze words that are bully, motivation, and facilitation conducted by educators, students, parents, and educational personnel in Early Childhood Education (ECE) institutions in Indonesia. This study uses a qualitative approach through phenomenological studies to analyze the emergence of bully words, facilitation, and motivation by ECE educators in the child's educational environment. The data was collected with participatory observation techniques, in-depth interviews, and documentation studies obtained from 252 educators as research subjects. Data analysis is done with interactive analysis techniques, which include data collection, data presentation, data sorting, data verification, and inference. In the data verification step, a triangulation test is conducted, which includes strengthening field studies, discussion of relevant literature, audit of data worthiness, and conformation test. The results of this study showed that the development of the diversity of bully, motivative, and facilitative words is still not well understood by teachers academically and implemented practices. The intensity, frequency, characteristics, and patterns of foster care during the child's stay at home greatly influence the attitude arising from the words spoken by parents and teachers during the child's learning process. The perception of the word spoken by parents and teachers is wellintentioned and has a positive motive to develop the personality of the child, it sometimes dwarfs the potential of creativity and development of the child.

Keywords: teacher, children, bullying, motivative, facilitative, ECE

Effect of Pbib Learning Model on Student's Cognitive Skills

Prasetiyo, Mimien Henie Irawati Al Muhdhar, Ibrohim, Murni Saptasari State University of Malang, Indonesia tiyopras.1603419@students.um.ac.id

Abstract— The purpose of the study was to determine the effect of the PBIB, PBL and Conventional Learning models on students' cognitive skills. The results showed that there was a significant difference between the cognitive skills of students in PBIB, PBL and conventional classes. The conclusion of this research is that there are significant differences in the cognitive skills of students in PBIB, PBL and conventional classes.

Keywords—PBIB, PBL, Conventional Learning and Cognitive Skills

Effect of Project Based Learning Model Based on Edmodo Application on Student's Learning Interest

Adirasa Hadi Prasetyo
STKIP PGRI Sumenep, Indonesia
adirasa@stkippgrisumenep.ac.id
A. Saeful Bahri
STAI Bhakti Persada Majalaya Bandung Indonesia
Dini Deswarni
STAI Hubbulwathan Duri Riau, Indonesia
Nindha Ayu Berlianti
Hasyim Asy'ari University, Jombang, Indonesia

Abstract— This study was to determine the effect of project based learning (PjBL) based on Edmodo application on student interest in learning. This research method is quantitative and uses T-test analysis. The results of this study indicate that learning activities with the Edmodo application-based project-based learning (PjBL) model raise student interest in learning content provided by the campus. Based on the value of t: it is known that the value of t count is 6.507 > T table 2.160. So it can be concluded that the project based learning model variable based on the Edmodo application (X) has an effect on the variable interest in learning (Y). The conclusion of the research conducted shows that the project based learning model based on the Edmodo application runs well and can increase students' interest in learning.

Keywords—Project based Learning; Edmodo Application; Student Interest

Effectiveness of Using Games "Circuit:Logic Gate Puzzle.Apk" as Scaffolding in Logic Gate Learning

Dewi Dewantara Universitas Lambung Mangkurat dewantara pfis@ulm.ac.id

Abstract— This article aims to analyze the effectiveness of using the game "Circuit: Logic Gate Puzzle.apk" as a scaffolding of logic gate learning on student learning outcomes. This type of research is descriptive quantitative. The number of research subjects was 25 students. Data were collected using pretest and posttest about logic gates. The pretest and posttest data were tested for normality and then tested for N-gain. The N-gain test results obtained a value of 0.702. Therefore, it can be concluded that the effectiveness of using the game "Circuit: Logic Gate Puzzle.apk" as scaffolding in learning logic gates is categorized as high. Thus, the use of the game "Circuit: Logic Gate Puzzle.apk" as a scaffolding of logic gate learning is effectively applied to improve student learning outcomes.

Keyword— Game, Logic Gate, Scaffolding

EFL Teachers' Professional Development Through Creative Prompt Writing For Building Children Characters

Ahmad Heki Sujiatmoko, Sri Rachmajanti, Sari Karmina, Nova Ariani State University of Malang, Indonesia ahmad.heki.fs@um.ac.id

Abstract— The research was aimed at invesigating about the EFL elementary teachers' writing skills. Writing is not only the important skill in the language learning, but also the access for leading the teachers to improve their own literacy. That's why, the EFL teachers must always think about their literacy as one of the ways to build their professional development. One of the creative writing products that is beneficial for the elementary students is writing about the prompts on building the students' characters. By doing this, the students can lead themseleves to form their own characters. The results revealed that the teachers investigated had a good capacity for creating the prompts that could be used as the instruction for telling the students to write something concerning with forming their own characters. Hence, what the teachers had done gave positive impacts on improving their own creativity as a part of the professional development and of leading the students to have the writing products and to build their own characters.

Keywords— Teachers' professional development, Creative prompt writing, Children's building characters.

Emotion Detection at Comments in Media of Online Learning Using Artificial Intelligence

Irawan Dwi Wahyono, Djoko Saryono, Hari Putranto, Khoirudin Asfani State University of Malang, Indonesia irawan.dwi.ft@um.ac.id Mohd Murtadha Mohamad, Mohd Nihra Haruzuan Bin Mohamad Said Universiti Teknologi Malaysia

Abstract— Many schools use online learning as media learning that all material of media such as videos, text, or audio can be given feedback from students. The teacher wants to know about the emotions of students such as happy, disappointed, or sad after they accessed the media and teachers get an evaluation of quality from their media. This research built an application to the detection of emotion from feedback in media. The application uses artificial intelligence to classification text from feedback and to determine the emotion of students. The application runs on a mobile device. The algorithm in the application is k-Nearest Neighbour for the text mining function in this research. The data of testing in this research take comments in youtube channels and online learning such as SIPEJAR. The result of testing is that the average accuracy is 0,797, the recall is 0.4595 and the average precision is 0,3421.

Keywords— emotion, artificial intelligence, mobile application

Engine Management System Onboard to Improve Problem Solving Abilities

Komarudin, Widiyanti, Marji, Eddy Sutadji State University of Malang, Indonesia widiyanti.ft@um.ac.id

Abstract— This article aims to reveal the effect of the engine management system on problem solving. This research is an interactive multimedia implementation in the automotive program at the Malang State University as many as 38 students who are divided into two groups, namely the control group and the experimental group. The population in this study are the students who have attended the training ototronik. The research data in this study were collected using written tests and face-to-face interviews and WhatsApp. Two data collection methods were chosen to verify each approach. The results showed that there was a significant effect of interactive multimedia on problem solving abilities to fix electrical problems in vehicles.

Evaluation Program Building Learning Power

Yayat Suharyat, Ibnu Muthi, Haswani Universitas Islam "45" Bekasi, Indonesia yayat suharyat@unismabekasi.ac.id

Abstract— This Building Learning Power program aims to optimize all students' capacities in developing aspects of cognition and soft skills as well as designing and realizing students' short and long term goals. This research is an evaluative research with CIPP evaluation model which includes four pillars: (1) Context, (2) Input, (3) Process, and (4) Product. This study aims to determine the success of the program for Building Learning Power at SMP Model Ar Riyadh Insan Cendikia Bekasi. The results of the study are as follows: 1) The context evaluation shows that this program is very much needed by students to increase their self-capacity and soft skills. 2) the input evaluation shows that the input of teachers, students and facilities and infrastructure is in good category. 3) the process evaluation is in good category, but the obstacles in the implementation of the program still need to be overcome. 4) the product evaluation is in good category. The Building Learning Power Achievement Program must continue to be improved. The advantages of the program can be felt by students and parents, but some aspects that have not been achieved in each pillar of daily activities still need to be improved.

Keywords— program evaluation, building learning power, cipp

Experience Using A Five-Component Blended Learning Strategy During The Covid-19 Pandemic

Nur Candra Eka Setiawan
School of Education, Universiti Teknologi Malaysia, Malaysia
Department of Chemistry, Faculty of Mathematics and Science, State University of Malang, Indonesia
nur.setiawan.fmipa@um.ac.id
Mohd Shafie Rosli
School of Education, Universiti Teknologi Malaysia, Malaysia

Abstract— The Covid-19 pandemic has caused all learning in Indonesia to be carried out online. Here, we present an overview of online learning held at Chemistry in the School Chemistry Laboratory Management course in Chemistry Department Universitas Negeri Malang. The blended learning approach used consisted of five stages known as Discover, Learn, Practice, Collaborate, and Assess (DLPCA). At DLPCA, the asynchronous part of teaching is carried out with video recordings shared in the learning management system (SIPEJAR) to enable students learn at their own pace. The synchronous part of the teaching is done using the Google Meet video conferencing platform. The DLPCA strategy was presented and discussed to students before being implemented. The analysis of teaching and learning experiences based on three indicators (i) student learning experience, (ii) student academic achievement and (iii) instructor observations showed that DLPCA had a positive impact on students and lecturers. The challenges faced are internet connection and hands-on learning experience in understanding laboratory equipment. Lecturers must also find ways to increase the interactions with students and maintain students' interest and engagement during online classes. The questionnaire also shows that most of the students are satisfied with the DLCPA strategy. Therefore, this strategy is considered as a manageable and effective alternative that can be adapted to full online instruction for other chemistry undergraduate courses.

Keyword— The Covid-19 pandemic has caused all learning in Indonesia to be carried out online. Here, we present an.

EYL Teachers' Perceptions and Practices of Assessing Creative Writing

Nova Ariani, Sri Rachmajanti, Sari Karmina, Ahmad Heki Sujiatmoko State University of Malang, Indonesia nova.ariani.fs@um.ac.id

Abstract— This study aims at investigating teachers' perception and practices of assessing creative writing. Data is collected through a questionnaire and focus group discussion from seven teachers teaching English writing skill in one primary school in Malang. The result shows that while some teachers shared similar challenges and common criteria for the assessment of creative writing, they highlighted the interplay of subjectivity and lack of training in assessing their students' creative writing. Thus, the need to investigate further regarding teachers' perception and practices in assessing students writing is essential to reflect on how writing skill including creative writing is taught and assessed in the context of teaching English for young learners in Indonesian primary school context.

Keyword— Assessing, creative writing, english for young learners

Fe3-xCoxO4/PEG/GO Nanocomposite from Coconut Skin Waste for Radar Absorbing Materials

Abstract-- Anti-radar is a microwave-absorbing technology, which has been widely studied as a stealth technology, so that aircraft or combat ships are not detected by enemy. The material studied as radar absorbing materials (RAM) in this paper is Fe3O4 from iron sand doped with Co which was composited with polyethylene glycol (PEG) and graphene oxide (GO). Interestingly, GO was developed from coconut shell waste using coprecipitation method to obtain RAM with excellent performance. This review examines related journals, both from the research we have produced previously and from other research groups. In general, coconut shell contains about 49.86% of carbon. Therefore by reducing the carbon atoms and hydrogen atoms in the coconut shells to create a single layer like that of GO. In addition, the addition of PEG as a polymer layer on the surface of Fe3-xCoxO4/PEG/GO was intended to stabilize and reduce the particle size to reduce coercivity for adjusting RAM performance.

Keywords: RAM, coconut skin, Fe3-xCoxO4/PEG/GO, composite, absorbing

Investigating the Memory Retention in Extension Concept Mapping

Didik Dwi Prasetya

State University of Malang, Indonesia., Hiroshima University, Japan didikdwi@um.ac.id
Aryo Pinandito
Hiroshima University, Japan., Universitas Brawijaya, Indonesia
Yusuke Hayashi, Tsukasa Hirashima
Hiroshima University, Japan

Abstract— Extension concept mapping has been shown to involve learners extensively active in learning activities and improve knowledge structures. Previous studies compared two extension concept mapping approaches, the Extended Scratch-Build (ESB) and Extended Kit-Build (EKB). The results reported that students who used EKB achieved higher comprehension test scores compared to those who used ESB. However, the initial study has not discussed the extent to which the two approaches affect students' memory retention in recalling the knowledge they have acquired. This study investigates the effect of memory retention on the ESB and EKB methods. ESB extends the open-ended concept map with the same techniques, while EKB extends the closed-ended Kit-Build (KB) with an open-ended fashion. KB is a recomposition map that asks learners to recompose a kit, teacher's maps decomposition, according to the knowledge target. A delayed comprehension test was used to measure group performance and was given two weeks after the immediate test. The results reveal that the memory retention of the EKB group was significantly superior to that of the ESB group. In particular, for the questions in the kit, the achievement of EKB had a remarkable difference, whereas for the questions not in the kit, although the accomplishment of EKB was consistent, no significant difference was found.

Keywords: concept map, delayed test, extension concept mapping, memory retention

Islamic Boarding Schools and Human Rights Enforcement (HAM) Transmission of Cultural Values for Disabilities at An-Nur Islamic Boarding School Bener Meriah Aceh

Suwarno, Uswatun Chasanah IAIN Takengon Indonesia, UIN Sunan Ampel Surabaya Indonesia fauzansuwarno@gmail.com

Abstract— The inclusive boarding school model is not only a form of embodiment of education that respects diversity and eliminates discrimination, but is more important as a form of application, essence, and religious theological substance that teaches equality of human rights, tolerance, and respect for others in all aspects of life. This research was conducted with the aim of knowing the inclusive boarding school education model initiated by the founder of An-nur Islamic boarding school, Tengku Drs H. Zainal Abidin. The research method used in this study is a type of qualitative research. Data collection techniques using participant observation, namely by way of researchers mingling with the object of research. The research was conducted at the An-nur Islamic Boarding School, Tingkem Asli Village, Bukit District, Bener Meriah Regency, Aceh. The research was conducted from July 2020 to July 2021.

The results of this study are that the pesantren model initiated by the founder is an integrated inclusive boarding school which was officially established in 2010. Inclusive Integration is a pesantren education model that unites regular (normal) students with ABK students (Children with Special Needs) in one Islamic boarding school environment, with an integrated education model, namely the integration between the concepts of Islamic boarding school education and entrepreneurship with a learning approach that emphasizes emotional and familial. Through this model, Pesantren An-Nur is able to transmit cultural values for persons with disabilities through the process of enculturation, socialization, acculturation with a Chinatown style building. Cultural transmission is applied to disability in inclusive boarding schools through vertical transmission, oblique transmission, and horizontal transmission. These three cultural transmissions are carried out in the educational process at Islamic boarding schools for 24 hours through theological understanding and translating at the practical level in the form of self-accustoming, exemplary, formal and informal learning, and life skills activities for students in Islamic boarding schools.

Keywords: inclusive boarding school, human rights, transmission of cultural values

I Prefer Asynchronous Now: Student's Preference and Teacher's Accomodation

Nanang Zubaidi State University of Malang, Indonesia nanang.zubaidi.fs@um.ac.id

Abstract— The study aims at exploring students' preference for distance learning-teaching mode (synchronous vs asynchronous vs combination of both) and technology used in distance-learning at university-level in linguistics courses and their preference changes overtime. Moreover, the study also focuses on how teachers accomodate students' preference in their teaching. participated in the study. The data were collected using three techniques: 1) pre- and post-semester surveys on thirty-five students taking an introductory linguistics course in an English department at a university in Indonesia, 2) teacher interview (n=1), and 3) class observations. The findings showed that students' preference can change overtime (combination of synchronous-asynchronous to asynchronous), which influence the teacher's teaching practice.

Keywords— Student's preference, learning-teaching mode, distance learning, teacher's accommodation

Identification Counselor-Student's Mind Skills as Their Metacognitions Level in Counseling Process

Husni Hanafi, Nur Hidayah, Adi Atmoko, M. Ramli State University of Malang, Indonesia hanafihusni.1901119@students.um.ac.id

Abstract— The cognitive activities of counselors also influence how counselors apply procedures, techniques and build counseling relationships, which also impact the success of the counseling provided. This study aims to describe the meta-cognition process of prospective counselor students during the counseling process in the form of Mind Skills. The research using a survey method for prospective counselors during the counseling process. The research results on the metacognitive process Most master the stage of cognitive knowledge, where prospective counselors are aware of the thoughts raised in the counseling process. However, only a small number of prospective counselors can bring their metacognitive processes into cognition regulation and direct their mind skills to full cognitive involvement during the counseling process. This condition illustrates that the counseling performance also involves thinking skills through the counselor's metacognition process.

Keywords— Mind skills, metacognition, counseling performance

Implementation of The Discovery Learning Model to Increase Student's Interest in Regional Economics Courses

Farida Rahmawati, Imam Mukhlis, Ermita Yusida State University of Malang, Indonesia farida.rahmawati.fe@um.ac.id

Abstract— In regional economics courses, how to find the leading economic sector is the main competency that students majoring in development economics must have. However, students' interest in learning is low, indicated by the completion of the tasks given by the lecturer to students which takes a long time and the results are not optimal. This paper aims to describe how the implementation of the discovery learning model can increase student interest in regional economics course participants in finding the leading economic sector. The implementation of this model is carried out in 4 stages, namely problem identification, calculation methods, compilation and interpretation of data, formulation of policy recommendations. The results show that the implementation of the discovery learning model in the four cycles can increase student interest effectively. This study recommends the need to combine discovery learning models with project based learning in finding the leading economic sector in regional economics courses.

Keyword— Discovery learning model, regional economics, students interest

Improving The Competency of Vocational Productive Teachers Through Industrial Cooperation Based on Regional Potential

Yoto, Puteri Ardista Nursisda M State University of Malang, Indonesia yoto.ft@um.ac.id Agung Nugroho Pramudhita Politeknik Negeri Malang, Indonesia

Abstract— Increasing the competence of educators must be done continuously because the success of learning is the responsibility of educators. Technology-based learning will help educators in the Industrial Revolution 4.0, especially vocational teachers who teach in productive fields (engineering subjects). Based on the analysis of the calculation of the needs of vocational teachers, it shows that in 2016 335,821 productive teachers are needed. At that time, there were only 100,552 productive teachers in SMK, consisting of 40,098 teachers who were civil servants and 60,482 teachers who were not civil servants. It means that there is a shortage of productive teachers in SMK, as many as 235,269. This deficiency is spread across all skill competencies. Of the number of productive teachers, very few have skills competency certificates. This problem needs to be immediately sought for a solution considering the orientation of the national vocational revitalization program is to produce graduates who have diplomas and certificates of expertise competency. In this direction, productive vocational teachers must also have expertise competency certificates.

Keyword— Student with Autism, Picture Exchange Communication System, Social Story, Expressive Communication

Improving The Validity of Multiple Choice Tests to Measure Students' Problem-Solving Ability of Buffer Solution Concep on Online Tests

Fahyuddin, Saefuddin, Abraham Rahman Halu Oleo University, Kendari fahyuddin@uho.ac.id

Abstract— The Multiple-choice tests have many weaknesses, such as not being able to distinguish student answers between those who gave correct answers because they understood and students who answered correctly because they guessed. In addition, the test method is not accurate in measuring problem solving abilities and makes it easier for students to work together when administered in online. The main purpose of this study is to develop a valid and reliable of mulitiple choice instrument for measuring students' problem solving abilities on the concept of buffer solution. The research sample for the empirical validity test was 120 grade XI of high school student in Kendari City. The test development strategy is to each stage in problem solving the buffer solution divide into a multiple choice question, and to minimize cheat each other in the online test, a question is made into four variation or codes. The results of the expert validation show that the multiple choice test developed has good content and construct validity and, it is effectively and efficiently applied by teachers in learning. Data analysis indicated that the instrument exhibited satisfactory validity and reliability with the sample used. The Cronbach's alpha coefficient was 0.71 for the entire instrument indicating a satisfactory level of internal consistency. The discriminant indiced of the instrument is 0.45 indicating very good category. The vast majority the respondents showed an inadequate grasp of concepts about buffer solution.

Keywords— validity of test, multiple choice, problem solving ability, buffer concept, online tes

Improving Expressive Communication in Children with Autism Using Social Story and Picture Exchange Communication System

Elisabet Kenila, Ediyanto Ediyanto, Mohammad Efendi, Imanuel Hitipeuw State University of Malang, Indonesia elisabetwitin@gmail.com

Abstract— In everyday human activities, both social and personal interrelations are needed communication. Cognitive abilities influence the communication process. Cognitive disorders experienced by children with autism cause them to experience communication problems. Communication disorders in children with autism cause them to become emotional quickly. In the learning process, children with autism can overcome communication disorders by maximizing their visual potential. In this article, a review of the visual media literature can improve the visual abilities of children with autism. The method used is a narrative review with steps to 1) determine the scope, 2) search literature, and 3) analyze the findings. The results found that to improve children's with autism communication skills and basic behavior, the Picture Exchange Communication System (PECS) can be used. PECS can get used to communicating with children with autism by using symbols that are appropriate to their daily activities. To increase the effectiveness, the implementation of PECS maybe can combine with the Social Story Model. Social Stories can help students with autism interpret and understand social situations with therapy using short stories.

Integrating Elements of Gamification-Based Assessment into Authentic Learning of The Graph Theory Application Online Course

Sapti Wahyuningsih, Abd. Qohar State University of Malang, Indonesia sapti.wahyuningsih.fmipa@um.ac.id Noor Azean Atan UTM Malaysia

Abstract— In everyday human activities, both social and personal interrelations are needed communication. Cognitive abilities influence the communication process. Cognitive disorders experienced by children with autism cause them to experience communication problems. Communication disorders in children with autism cause them to become emotional quickly. In the learning process, children with autism can overcome communication disorders by maximizing their visual potential. In this article, a review of the visual media literature can improve the visual abilities of children with autism. The method used is a narrative review with steps to 1) determine the scope, 2) search literature, and 3) analyze the findings. The results found that to improve children's with autism communication skills and basic behavior, the Picture Exchange Communication System (PECS) can be used. PECS can get used to communicating with children with autism by using symbols that are appropriate to their daily activities. To increase the effectiveness, the implementation of PECS maybe can combine with the Social Story Model. Social Stories can help students with autism interpret and understand social situations with therapy using short stories.

Keyword— The application of graph theory, authentic learning, elements of gamification, Gamification-based assessments

Interactive Web Learning for Cad 3d Courses to Increase Special Practice Skill of College Student in Pandemic Situation

Firman Lutfi F.A, Ahmad Amrul Gofin , Hikmah Cahya Dinniah , Fadhila Wahyu Putri , Andika Bagus N.R.P

State University of Malang, Indonesia firmanlutfi.9e@gmail.com

Abstract— Corona virus disease 2019 (covid-19) which is being through the world, brings direct impact in education sector. The Ministry of Education issue a decision about online learning in order to prevent the spreading of covid-19. The online learning that has been implemented hasn't been succesfull. It needs supporting media which is make easier to understand the courses. The method that be used in this learning media research is R&D (Research and Development) from Sugiyono. The stage and process of this method is very systematic, in other stage the produc of this research has to be validated. It means the produc is reliable. The application of website as the learning media for CAD 3D courses makes eassy the students and also lecture to acces the teaching materials, which is equipped by some suitable—features. The website also completed by tab quiz that can be used by college student to evaluate their knowledge about the teaching materials that has been discussed. The application of learning media based on website for CAD 3D courses brings some benefits for college student and also lecture, because the learning media has eassy to acces, user-friendly interface, and also completed by some features to support learning activites.

Keyword— CAD 3D Courses, Covid-19, learning media, website

Learning Management System to Improving Students Computational Thinking Skills with Assessment for Learning Method

Agung Nugroho Pramudhita, Odhitya Desta Triswidrananta, Indra Dharma State Polytechnic of Malang, Indonesia agung.pramudhita@polinema.ac.id

Abstract— In this digital era, where the world of work leads to globalization, competition in the world of work demands good problem-solving skills. To overcome these problems, Computational Thinking (CT) is an approach in the learning process, where computational thinking is a problem-solving technique with an extensive area of application that includes the ability to solve problems and find solutions by utilizing basic concepts in informatics. The assessment for Learning (AfL) method can be used to Learn CT as one way of assessing or evaluating learning. The main principle in implementing AfL is a thorough evaluation of the planning, the process, and the end of learning. Educators are directed to have professional knowledge and skills in teaching. In contrast, students must improve and enhance their learning process by involving them in self-assessment so that the quality of learning processes and products is better. Operationally, this integration is a process of finding and interpreting information related to the problems faced by students in their learning. Based on this, a Learning Management System (LMS) was developed as a learning medium which was carried out with a 4D research and development model, namely a) Define; b) Design; c) Develop; and d) Disseminate. Assessment For Learning is applied in online learning using the Learning Management System to improve students' Computational Thinking skills to solve problems in the world of work.

Keyword— Problem Solving; Computational Thinking; Assessment for Learning; Learning Management System

Learning Media Innovation Based on Artificial Intelligence Intregrated with Ubiquitous Learning

Achmad Murdiono, Andi Basuki, Andreas Syah Pahlevi State University of Malang, Indonesia achmad.murdiono.fe@um.ac.id Nik Mohd Hazrul Nik Hashim Universitas Kebangsaan Malaysia

Abstract— Human Resource (HR) development is part of the process and objectives in Indonesia's national development. Various efforts need to be made to improve the quality of human resources, education is one of the main efforts to make it happen. Therefore, a strategic step is needed in realizing education as one of the pillars of teachers in realizing quality human resources. The purpose of this study is to design and build innovative learning media integrated with ubiquitos learning through artificial intelligence technology by utilizing the Chatbot application features that can be used, to meet the learning needs in preparing for further study. This research consists of three main stages, namely (1). Preliminary study by conducting theoretical and field agreements so as to be able to formulate needs in the preparation of the platform. (2). The second stage begins with product planning by providing product differentiation in the form of chatbots and everyday intensive courses then developing into a Learning Management System in the initial form of the product. (3). The activities that are needed at this stage are the first trials by experts to validate the material and media. The results of this study are in the form of a platform developed in the form of text, animation, and video by utilizing artificial intelligence (AI) technology in the chatbot application feature that is tailored to the needs and learning stages of students that have been implemented in the Integrated Learning Management System, ubiquitos learning.

Keywords— Learning media innovation, artificial intelligence, chatbot, learning managemen system

Pictures Don't Lies: An Adaptive Learning Model with Augmented Reality for Chinese Characters Recognition

Weishen Wu, Triyono Indrasiwi Kuncoroaji
Da-Yeh University, Taiwan
wsw@mail.dyu.edu.tw
Muhammad Ashar, Vertic Eridani Budi Darmawan
State University of Malang, Indonesia

Abstract— Children with weak Chinese characters skills are more likely to give up reading the subject content of long texts, which affects their learning in the long term. This study applies an augmented reality (AR) to develop an adaptive learning model for recognition of Chinese radicals and assesses its effectiveness on disadvantaged students in an elementary school. Based on several Chinese characters that were easy for children to confuse radicals, an AR application for Android was developed and installed in tablet computers. The adaptive learning model involves students to use AR app to scan radical cards to trigger animations introducing the evolution of radicals. Students can practice Chinese character writing on the tablet computer's screen. With the multiple stimulus of AR, teachers interacted with students through a series of remedial teaching process. To assess students' learning, a teaching experiment was implemented to eight disadvantaged students in Chinese literacy in an elementary school. Results showed that this adaptive learning model improved the disadvantaged students' recognition accuracy on Chinese characters and flips their fun in learn to read Chinese characters. Implications for Chinese characters teaching practices are discussed.

Keywords: adaptive learning, augmented reality, Chinese radicals

Profile of Pattern Story Question Resulting Number based on Ability Level of Mathematics Students Class VII SMPN 21 Bulubonggu

Anggraini, Pathuddin, M.Rijal Tabir

Mathematics Education, Department of Mathematics and Natural Science Education, Faculty of Teacher

Training and Education, Tadulako University,

Palu 94118 – Indonesia

anggraini math@hotmail.com

Abstract-- This study aims to describe the completion of the number pattern story problem based on the completion steps according to O'neil in terms of the level of mathematical ability in class VIII SMPN 21 Bulubonggu. This type of research is qualitative research. The subjects of this study were selected based on the results of the grade VIII A student report cards in the 2020/2021 odd semester. The subjects used in this study were 3 students taken from 18 students, namely one student each with high, medium, and low math abilities. The results of this study are: (1) At the stage of understanding the context of the problem or verbal problem, the subject with high mathematical ability and presenting information is known, namely Nurdin notes the number of papayas harvested every month and the formula $U_n = 90 +$ 65n, then presents the information asked, namely counting the number of papayas that have been harvested for 24 months. Meanwhile, subjects with low mathematical abilities only present known information, namely Nurdin harvests papayas in his garden every 3 days and he records the number of papayas harvested for 24 months. (2) At the stage of compiling or making relevant models, subjects with high and moderate mathematical abilities use the arithmetic series formula, namely $S_n = \frac{n}{2}$ (a+ U_n) to solve the problem. Meanwhile, subjects with low math skills use the arithmetic sequence formula, namely $U_n = [a$ + (n-1) b] to solve the problem. (3) At the stage of manipulating and completing the model, the subject has high mathematical ability and is solving the problem, according to the plan that has been made, namely by finding the value of the first, second, third and 24th terms using the U_n formula contained in the problem. Next, substitute the values of n, a, and U₂₄ into the arithmetic series formula, then perform addition, multiplication and division operations according to mathematical rules and get the correct result. Meanwhile, subjects with low mathematical abilities make mistakes in applying formulas and are less precise in performing arithmetic operations so that they get inaccurate results. (4) At the stage of drawing conclusions contextually, the subject has high mathematical ability and is making conclusions, namely the number of papayas that Nurdin harvested for 24 months is 21,660 pieces. Meanwhile, subjects with low mathematical abilities presented the conclusion that the amount harvested for 24 months was 1190n.

Platform for Design, Writing, and Publication of Scientific Articles Based on Class Action Research (Car) Integrated Internet of Things to Improve Teacher's Pedagogical Competence

Hayuni Retno Widarti, Deni Ainur Rokhim, Habidin, Nur Candra Eka Setyawan, Parlan, Afis Baghiz Syafruddin, Ananta Ardyansyah State University of Malang, Indonesia hayuni.retno.fmipa@um.ac.id

Abstract— Teachers can develop their profession through Continuous Professional Development (PKB) activities. One form of teacher professional development is the publication of scientific works. Teachers still have not conducted classroom action research (CAR) on an ongoing and consistent basis, but it is still incidental. No wonder high school teachers have low ability in writing scientific papers. The purpose of this research is to produce a platform for CAR-based scientific article education. The type of research is research and development (R&D) using the ADDIE model. The result of the research is that the use of planning platforms, writing scientific articles can overcome the obstacles that have existed so far. This platform has several excellent features, namely planning, writing, publishing articles, materials, and Chat features. Thus, it can be seen that the CAR-based scientific article training platform that is integrated with the Internet of Things can improve the pedagogic competence of teachers.

Keyword— CAR, Platform, Scientific Articles, Teacher Pedagogy

Policy Directions for The Management of Dhf in The City of Palembang

Cipta Estri Sekarrini, Sumarmi, Syamsul Bachri, Didik Taryana State University of Malang, Indonesia cipta.estri.1907219@students.um.ac.id

Abstract— This study aims to determine the distribution of dengue fever in the city of Palembang and then make a policy direction for the prevention of dengue fever in the city of Palembang. This research was carried out in all areas of Palembang City. This research is descriptive research with a quantitative approach. The sample of this study was DHF patients who were found in each Puskesmas registered at the Palembang City Health Office with purposive sampling technique. Data collection includes observation data, the health office, interviews, documentation. Data analysis techniques used include GIS analysis and Analytical Hierarchy Process (AHP). The results showed that the distribution of DHF in Palembang City has three levels, namely, high, medium, and low, which are spread over 18 sub-districts of Palembang City. Then the Policy Directions obtained are: 1) suppressing the rate of population growth, 2) socializing about DHF, 3) improving drainage channels, 4) eradicating mosquito nests, 5) routine larvae inspection.

Religiosity and Nomophobia Among Undergarduate Student: The Moderating Role of Self-Control

Nadia Nur Afifah, Hariz Enggar Wijaya Universitas Islam Indonesia, Yogyakarta hariz.wijaya@uii.ac.id

Abstract— This research aims to investigate the moderating role of self-control in the relationship between religiosity and nomophobia among students. A total number of 288 undergraduate students enrolled in this study. They were administered three self-report instruments to collect data, the No Mobile Phone Phobia Questionnaire, religiosity scale, and brief self-control scale. The results showed there was a negative correlation between religiosity and nomophobia, as well as a negative correlation between self-control and nomophobia. Analysis results also point out there is a positive relationship between religiosity and self-control. Furthermore, moderator analysis indicated that self-control could moderate the relationship between religiosity and nomophobia. These findings underline the role of self-control as a protective factor when students prone to nomophobia.

Keyword—Self Control, Religiosity, Nomophobia, Undergraduate student

Self-Assessment: How do Accounting Students Respond it?

Aulia Herdiani, Endang Sri Andayani State University of Malang, Indonesia aulia.herdiani.fe@um.ac.id

Abstract— Accounting learning has been criticized since it has not been able to produce graduates who have the skills needed by the industries. Moreover, the use of conventional learning methods is considered more appropriate because of the demands for the technical and procedural expertise in the accounting profession. In practice, the accounting profession also requires non-technical skills that rely more on subjectivity and critical thinking. Critical thinking skills are important for accounting practitioners, apart from their intellectual and educational skills to remain being competitive in the rapidly growing economy. Previous research has proven that self-assessment can build students' motivation in carrying out tasks because they are involved in decision making. By conducting a quasi-experimental study, this research intends to observe students' perceptions and responses to the implementation of self-assessment in accounting learning. The results show that students who have high participatory scores tend to have a positive attitude towards the series of self-assessment tasks given, but this does not apply to technical assessments. On the other hand, this positive attitude affects the students' comprehensive assessment results. It is inferred that self-assessment is decent to be applied as a structured learning assessment to improve non-technical skills of Accounting students, especially critical thinking skills.

Keyword— Accounting students, self-assessment, critical thinking, non-technical skills

Student's Perceptions of Digital Pedagogy at the University of Lagos, Nigeria

Maruff A. Oladejo, Kehinde A. Adeyemo
Faculty of Education, University of Lagos, Akoka, Nigeria
maoladejo@unilag.edu.ng
Sri Wahyuni
Faculty of Education, Universitas Negeri Malang, Malang, Indonesia
Nelson Adewole Ige
School of Education, Adeniran Ogunsanya College of Education, Ijanikin, Nigeria

Abstract— In the recent times, digital transformation of education has made digital pedagogy imperative so as to meet up with the 21st Century teaching-learning expectations. This study therefore interrogated students' perceptions of digital pedagogy in terms of their attitudes, skills, literacy, and satisfaction at the University of Lagos, Nigeria. The study used the descriptive survey design and guided by one research question and two null hypotheses. A total number of 240 participants, selected through disproportionate stratified random sampling technique, out of over 23, 000 target population, constituted the sample size. A self-designed instrument entitled "Students' Perceptions of Digital Pedagogy Questionnaire (SPDPQ) was used for data collection, while analysis was carried out using t-test, mean, and standard deviation score. Findings revealed that students' perceptions of digital pedagogy in terms of their attitudes, skills, and satisfaction were negative, except their digital literacy. There was no significant difference in students' perceptions of digital pedagogy based on programme, while gender made significant difference. Digital pedagogy generally needs to be properly implemented at the University of Lagos, Nigeria. It was therefore recommended among other things that the Management of the University should further strengthen the necessary infrastructure and enabling environment that will make digital pedagogy more stimulating.

Keywords: Digital pedagogy, Digital skills, Digital literacy, Digital attitudes

Student Self-Regulated Learning Strategies on Pandemic Covid-19

Nur Eva State University of Malang, Indonesia nur.eva.fppsi@um.ac.id Sri Andayani Universitas Airlangga, Indonesia

Abstract— This study aims to map the Self-Regulation Learning (SRL) strategy used by students during the Covid-19 pandemic. This research was conducted using a written interview with open questions. As a result, the strategies that were widely used by students during distance learning during the Covid-19 pandemic were seeking peer assistance, environmental structuring, reharsing and memorizing, seeking information, and reviewing text. The strategies used by individuals are not only one form, they use more than one strategy in learning regulation. Some strategies are also carried out only in certain contexts.

Keyword— self-regulated learning, covid-19 pandemic

Technical Vocational Education and Training (TVET) Innovation with Competency-Based Training Model in improving Human Resource Soft-Skills

Rusmulyani Department of Informatics Education, Universitas Pendidikan Ganesha

Abstract— Vocational education and training have an important role to play in the development of the whole human being and in the development of Indonesian society as a whole. Human development must be carried out as a whole, which includes the development of thinking abilities, mental capacities, physical and psychomotor skills, mastery of science, and technology. Therefore, the success or failure of the role of vocational education can be measured from the balance of these two goals, namely the development of the whole human being and the development of the whole Indonesian society. Andragogy, as a learning approach can be used in the implementation of education and training of human beings in formal, nonformal and informal institutions. Andragogy is an integral part of Technical Vocational Education and Training (TVET). Vocational education and training have an important and strategic role in preparing community members to be able to work and conduct their activities orderly mannher, which has implications for economic growth and welfare in general. To answer the various kinds of problems above, it is very important for the role of Technical Vocational Education and Training (TVET) to be able to prepare human resources as a whole in developing sotf-skills by applying a competency-based training model.

Keyword— TVET, Competence, Soft-skills

Technopreneurship Engagement: The Behavioural Intentions of Nigerian and Indonesian Undergraduates in an Emerging Society 5.0

Maruff Akinwale Oladejo
Department of Educational Management, University of Lagos, Akoka, Nigeria
maoladejo@unilag.edu.ng
Sri Wahyuni
Department of Non-Formal Education, Universitas Negeri Malang, Malang, Indonesia

Abstract— Technopreneurship is a new concept in the field of entrepreneurship. It involves human innovations with the help of technology for individual and national socio-economic development. Developing the mindset of the younger ones towards technopreneurship engagement is important so as to reduce youth unemployment. This study therefore investigated some factors namely entrepreneurship attitudes, skills, and knowledge (e-ASK), technological attitudes, skills, and knowledge (t-ASK) in relation to the behavioural intentions to technopreneurship engagement among Nigerian and Indonesian Undergraduates in an Emerging Society 5.0. The descriptive research design was used. The study was piloted by two research questions and one null hypothesis. The target population comprised all 5019 undergraduates in two purposively selected Nigerian and Indonesian universities, out of which 336 were selected through stratified random sampling technique. A self-designed, validated, and reliable instrument (r=.88) entitled "Behavioural Intentions of Technopreneurship Engagement Scale (BITES)" was used for data collection. Methods of data analysis were Multiple Regression and Independent t-test. Findings showed that the joint contributions of e-ASK and t-ASK to the variance in technopreneurship engagement were 5.5% and 11.3% respectively. There was also significant difference in behavioural intentions to technopreneurship engagement among Nigerian and Indonesian Undergraduates ((t=-2.376; df=334, p<.05). We therefore recommend among others that students should be encouraged to develop positive attitudes towards entrepreneurship and technology which made the highest relative and significant contribution to behavioural intentions to technopreneurship engagement.

Keywords: Entrepreneurial Attitudes, Entrepreneurial Skills, Entrepreneurial Knowledge, Technological Attitudes, Technological Skills, Technological Knowledge

Text Mining for Clasification Material in Online Learning

Irawan Dwi Wahyono, Djoko Saryono, Hari Putranto, Khoirudin Asfani State University of Malang, Indonesia irawan.dwi.ft@um.ac.id Mohd Murtadha Mohamad, Mohd Nihra Haruzuan Bin Mohamad Said Universiti Teknologi Malaysia

Abstract— There are many resources for media learning in online learning that all of the teachers made many media which it made a problem if there have the same subject and material. This problem made online learning having the big database and many materials made useless because the material has the same purpose. If teachers thought a new subject, they must make a media learning but they didn't know in online learning having material for the new subject. This research to fix this problem developed an algorithm in Artificial Intelligence for the classification of material in online learning with the same subject and purpose so that teachers can use already media. This algorithm is embedded in the mobile application to display the classification and the location of searching media in database online learning. The testing in this research applied in 142 media with 130 data training and 12 data testing and the result of testing is 92% of accuracy.

Keywords— text mining, artificial intelligence, mobile application

The Development of Educational Novel as a Source of Self-Study for Senior High School Students on Radioactive Elements

Widya Kartika Aditya, Munzil State University of Malang, Indonesia widya.kartika.1703316@students.um.ac.id

Abstract— In an effort to create quality education, it is necessary to develop relevant learning resources to realize the effectiveness of learning without restricting students from having to learn in class. The purpose of this development research is to develop a novel chemical material for radioactive elements based on content standards as a valid and appropriate source of independent study for senior high school students. The development model used in this research process refers to the ADDIE development model with the following steps: analysis, design, development, implementation, and evaluation. At the implementation stage, a chemistry novel validation test was conducted by 1 chemistry lecturer and 2 senior high school chemistry educators as chemists and media experts. In addition, a limited trial was conducted on 31 senior high school students as users to determine the readability of the novel. The validation instrument is in the form of a questionnaire containing aspects and assessment criteria. The validation of media experts and material experts includes 7 aspects of assessment with 37 indicators of assessment and responses from students include 3 aspects of assessment with 12 indicators of assessment criteria. The results showed that the results of material validation were 87%, the results of media validation were 85.4%, and the results of the readability test were 87.3%. The research product obtained is a chemical novel of radioactive elements based on content standards as a source of independent learning for senior high school students. Novel chemistry of radioactive elements can be used as an alternative learning resource that can make it easier for students to learn chemistry.

Keywords— Chemistry Novels; Educational Novels; Learning Resources; Radioactive Elements

The Development of Learning Media Based on Augmented Reality, Hologram, and Ludo Game on The Topic of Molecular Shapes

M. Muchson, Oktavia Sulistina, Rifqon Hakiki, Asia Febriana State University of Malang, Indonesia m.muchson.fmipa@um.ac.id

Abstract— Currently, technology-based learning media is needed to attract students' learning interest. Augmented Reality and Hologram, both technologies are able to answer these problem. In addition, the Ludo Game can also increase the student's learning interest when applied as a learning media. This study aims to: developing a learning media based on Augmented Reality, Hologram, and Ludo Game on the topic of molecular shapes, as well as knowing the feasibility of this learning media. Research and Development (R&D) is used as research methods. The development of media adapted the ADDIE model, which includes the stage: assessment/analysis, design, development, implementation, and evaluation. The feasibility of this learning media is based on the results of product validation as a learning media, material, and small group trials of 17 Senior High School students. The results of study found that the percentage of product validation results as a learning media is 85,56% (very feasible), material is 88,00% (very feasible), and small group trials is 87,25% (very feasible). Based on this, it can be concluded that this learning media is very feasible to be implemented in the study on the topic of molecular shapes.

Keywords— augmented reality, hologram, learning media, ludo game, molecular shapes

The Development of Organic Chemistry Teaching Materials 2 by Using Android-Based Stem Approach

Dewi Handayani, Endang Widi Winarni, Agus Sundaryono, M. Lutfi Firdaus University of Bengkulu, Indonesia d.handayani@unib.ac.id
Muzanip Alperi
Institution of Education Quality Assurance, Indonesia

Abstract— The purpose of this study was to develop teaching materials for Organic Chemistry 2 by using an android-based STEM approach using a professional flip pdf application, analyze the readability of teaching materials and determine student learning outcomes for the developed teaching materials. This research belongs to the Research and Development type of the Borg and Gall model. This research was only carried out until the small class trial stage, starting from the research and information gathering stage, planning, developing the initial product format, validation testing, initial product revision, field testing, product revision of field test results. The research subjects were undergraduate students of Chemistry Education who took organic chemistry courses 2. The instruments in this research were a material expert validation questionnaire, media expert validation and evaluation test sheets. The results showed that the teaching materials developed were considered feasible by the material expert validators with a percentage score of 93.33% (very feasible category) and media experts 95.67% with a very decent category. The data from the readability test of teaching materials averaged 92.38 with a very good category. Student learning outcomes pretest and posttest scores increased from 55.56 to 78.61, the N-gain value was 0.51875 in the medium category. Based on this, it can be concluded that organic chemistry 2 teaching materials using an android-based STEM approach are very feasible and can improve student learning outcomes.

Keywords— Organic Chemistry 2, STEM Approach, Android

The Development of Virtual Laboratory on Qualitative Analysis Chemical Practicum Cation Group I and I Based on Multiple Representation with Internet Integrated

Hayuni Retno Widarti, Moh. Ilmanul Hakim, Deni Ainur Rokhim State University of Malang, Indonesia hayuni.retno.fmipa@um.ac.id

Abstract— Analytical chemistry is a branch of chemistry that studies theories and how to perform chemical analysis of a material or chemical substance. In chemistry, especially analytical chemistry, there are three levels of representation that can help students to understand as a whole, namely macroscopic, submicroscopic, and symbolic. Chemistry is closely related to practical activities, one of them is analytical chemistry practicum. It takes innovation of particum media learning to prepare students in practicum activities well. An alternative solution is to use learning media in the form of a virtual laboratory. The objectives of this research and development are develop virtual laboratory in qualitative analysis chemical practicum for cations group I and II based on multiple representation with internet integrated and determine the feasibility of a virtual laboratory in qualitative analysis chemical practicum for cations group I and II based on multiple representation with internet integrated, this research and development use the R & D (research and development) method with a 4D (four-D) development model. The instruments used are in the form of a material validation questionnaire, a media validation questionnaire, and a readability test questionnaire. The data for this research is qualitative data and quantitative data obtained by conducting expert validation and legibility testing. The results showed that media expert validation was 87.8% (very valid), material validation was 82.7% (very valid). The results of the readability test obtained percentage values of 91% and 92.3% (Very Valid). The developed virtual laboratory provides an explanation of three levels of representation that can help students in practical activities well. Based on these data, the virtual laboratory in the qualitative chemical analysis practicum for group I and II cations that was developed is feasible to use.

Keyword— Virtual laboratory, group I and II cation analysis chemistry, three levels of representation

The Effectiveness of Contextual Problem-Solving Based Integrative Online Learning on Fundamental Physics for Higher Education

Yessi Affriyenni, Sutopo, Chusnana Insjaf Yogihati State University of Malang, Indonesia yessi.fmipa@um.ac.id

Abstract— The prolonged Covid-19 pandemic forces courses to keep conducted online using technology optimally. This study aims to investigate the effectiveness of problem-solving-based learning using Moodle-based Learning Management System (LMS) integrated with synchronous online meeting and virtual laboratory towards students' physics comprehensive understanding and problem-solving skills compared to problem-solving-based learning that only uses Moodle-based LMS as either the synchronous and asynchronous platform. This study was conducted by using a pretest-posttest quasi-experiment design supported by qualitative response involving 52 students selected randomly in Science Education Study Program, Faculty of Mathematics and Natural Sciences, Universitas Negeri Malang. This study shows that students who took a problem-solving-based online course using synchronous online meeting and virtual laboratory integrated LMS, their physics problem-solving skills and comprehensive conceptual understanding are better than those who learn only using non-online meetings synchronous such as only using discussion forum and assignment. Besides, students were more enthusiastic and more active in discussing briefly asynchronously before the online meeting session. Students' fundamental concepts are better constructed when they are involved in the investigation using the virtual laboratory to solve contextual problems. Hence, the use of LMS integrated with online meeting platforms and virtual laboratories is effective to improve physics understanding comprehensively and develop students' contextual problem-solving skills. This study has the potential to be developed further for wider use in learning.

Keywords— Integrated media, online learning, problem-solving

The Innovation of E-mapping System BIG DATA Based on the Leading Potential Areas and Superior School Majors to Increase the Effectiveness of Learning and National Policy Programs

Andika Bagus Nur Rahma Putra, Nurul Ulfatin, Windra Irdianto , Mahfudi Sahly Subandi State University of Malang, Indonesia andika.bagus.ft@um.ac.id ,Tee Tze Kiong Universiti Tun Hussien Onn Malaysia, Malaysia

Abstract— This research aims to: (1) map the superior potential of the region; (2) mapping the leading schools in the vocational field; (3) developing an innovative e-mapping learning system based on a map of the superior potential of areas and major schools; (4) examining the attractiveness of the e-mapping learning system innovation based on a map of the superior potential of the region and the school's leading department to improve the effectiveness of learning and national policy programs. This study uses research and development (R&D) methods, followed by quasi-experiments to test its effectiveness. The research is focused on the island of Java, which consists of the results and findings of this study include: (1) a map of the superior potential of the region on the island of Java, consisting of DKI Jakarta (trade, services, and industry), Banten Province (trade, industry, and services), West Java Province (trade, industry, and services), Central Java Province (agriculture, industry and community services), East Java Province (industry, agriculture), asnd DI Yogyakarta Province (trade, agriculture, and mining); (2) map of the leading majors of vocational schools on the island of Java consisting of information and communication technology, health and social work, business and management, tourism, arts and creative industries, and technology and engineering; and (3) the level of attractiveness of the e-mapping learning system innovation based on a map of the superior potential of the area and the school's leading department has a percentage of 93% (attractive and feasible), agriculture and mining); (2) map of the leading majors of vocational schools on the island of Java consisting of information and communication technology, health and social work, business and management, tourism, arts and creative industries, and technology and engineering; and (3) the level of attractiveness of the e-mapping learning system innovation based on a map of the superior potential of the area and the school's leading department has a percentage of 93% (attractive and feasible).

Keywords— E-mapping, superior potential, the effectiveness of learning, national policies

The Innovation of Hi-World Smart Book Integrate with AR to Accelerate The Recovery of Covid-19 Patients in The Disruptive Era

Dewi Sabrina Meidyanti, Andika Bagus Nur Rahma Putra, Hernanda Ade Apriansyah[,] Annas Tohuri^{4,}
Masqurriah⁵, Dedi Chandra
State University of Malang, Indonesia
andika.bagus.ft@um.ac.id
Yee Mei Heong
Universiti Tun Hussein Onn Malaysia

Abstract— the purpose of this research is to: (1) improving innovation in the interactive educational book called Hi world integrated with augmented reality; (2) Testing The level of attraction in the innovation of the interactive educational book called Hi world integrated with augmented reality; and (3) Testing the level of apropriateness with the innovation of the book called Hi world integrated with augmented reality for covid-19 patients. The method that we use in this research is R&D involving the expert of Covid-19 and digital media expert. The result from this research is are as follows: (1) innovation of the book called Hi world integrated with augmented reality that improved to have good level of apropriateness with a score of 99%; (2) level of attraction with this book called Hi world integrated with augmented reality have design choices that suitable for the requirement that covid-19 patients needs.

Keywords—Covid-19, Disruptive era, Hi World, Smart Book, Augmented Reality

The Integration of Augmented Reality into MOOC's in Vocational Education to Support Education 3.0

Ahmad Mursyidun Nidhom, Andika Bagus Nur Rahma Putra, Azhar Ahmad Smaragdina, Gres Dyah Kusuma Ningrum, Muhammad Afnan Habibi, Setiadi Cahyono Putro State University of Malang, Indonesia nidhom.ft@um.ac.id
Jailani Md Yunos
Universiti Tun Hussein Onn Malaysia

Abstract— This research discovered: (1) the development of a MOOC (Massive Open Course Online) learning innovation that incorporates Augmented Reality and is aimed at vocational high school students; and (2) the development of a MOOC (Massive Open Course Online) learning innovation that integrates Augmented Reality and is aimed at vocational high school students (2). The use of the concept of AI Injected e-Learning (The Future of Online Education) in Vocational High Schools, which supports the concept of Education 3.0 and includes a variety of sub-variables that imply an interdisciplinary approach; and (3). The development of MOOCs has resulted in integrated Augmented Reality, which can help vocational high school students enhance their learning styles and improve their learning outcomes. This study employs a quantitative method to educational research and development, with rese4.0arch sampling taking place in vocational high schools in Malang and Batu City. The findings of this research lead to the following conclusions: (1) The efficacy and efficiency of MOOC's learning innovation integrated Augmented Reality was evaluated to be 87.3 percent in a usability test, indicating a high level of user comfort in the user pleasant category and efficient usage of the program; (2). The application of the concept of Education 3.0 proved to have a significant impact on learning comfort, as evidenced by a questionnaire instrument that revealed that around 78.8% of users believed that online and face-to-face learning provided flexibility in learning, 12.2% felt that learning was normal, and 10% felt that learning was not required; (3). The results of the correct hypothesis are acquired from the quantitative data with a significance value of greater than 0.5, indicating that MOCC's integrated learning utilizing Augmented Reality has resulted in a significant increase in the learning outcomes of vocational high school students by 38 percent.

Keywords—MOOC's, Augmented Reality, Vocational Education

The Kirkpatrick Model Integrate with 4-Level as an Evaluation Design for The Implementation of Vocational Educator Training in The 21st Century

Eddy Sutadji, Andika Bagus Nur Rahma Putra, Dyah Esti Rahayu, Ning Fadilah, Titin Sukmasari,
Agustina Mardika Rini
State University of Malang, Indonesia
eddy.sutadji.ft@um.ac.id
Tee Tze Kiong
Universiti Tun Hussien Onn Malaysia, Malaysia

Abstract—The objectives of this study include: (1) measuring the satisfaction of vocational educators at the reaction level; (2) measuring the increase in knowledge and skills of vocational educators at the learning level; (3) measuring the ability of vocational educators in applying knowledge at the behavioral level; and (4) measuring changes in the ability of vocational educators at the impact level. The research method used in this study is an evaluation research method. Evaluation research methods include: (1) component identification; (2) identification of aspects; (3) identification of indicators; (4) determine the data source; (5) determine the method of data collection; and (6) determine the data collection instrument. The evaluation model used is the kirkpatrick model, consisting of input, process, output and outcomes. The instruments used in this study were questionnaires, learning outcomes tests, interviews, and documentation studies. Data analysis by using triangulation. The results of this study include: (1) the average percentage level of reaction to the resource component is 82%, the training material component is 87.7%, the facility component is 85.7%, the activity schedule component is 91.57%; (2) increased knowledge and skills of vocational educators at the learning level by 79%; (3) the ability of vocational educators to apply knowledge at the behavioral level is in the very good category; and (4) at the impact level, positive changes occurred after the training, as evidenced by the fact that vocational educators were able to prepare annual programs, prepare semester programs, prepare lesson plans and prepare worksheets and get a very good category.

Keywords— kirkpatrick model, evaluation design, vocational educator, 21st century

The Role of Machine Element Applications (MEA) to Support The Implementation of Distance Learning in Machine Element Course

Riana Nurmalasari, Marsono, Yoto, Nonny Aji Sunaryo State University of Malang, Indonesia riana.nurmalasari.ft@um.ac.id

Abstract—The development of learning media in the digital era is very fast. This allows learning activities to be accessed from anywhere and anytime. Distance learning is becoming more common and more flexible to implement. This study aims to determine the role of MEA application in the implementation of machine element learning. This research is quantitative descriptive. The population of this research is Diploma students on Mechanical Engineering Department, State University of Malang. Based on the results of the analysis obtained 5 conclusions. First, the ease of access to the MEA application is 78.6%. Second, the ease of using the MEA application for the machine element learning process is 82.1%. Third, the role of the MEA application in helping the machine element learning process is 75%. Fourth, the suitability of MEA application technology for distance learning in the machine element course is 89.3%. Fifth, the role of MEA applications to improve machine element learning outcomes is 82.1%.

Keywords— Machine Element Applications (MEA), distance, learning, media

The Role of Metacognitive Knowledge, Metacognitive Skill, Epistemological Understanding and Intellectual Values to Control of Variables Strategy

Ika Andrini Farida State University of Malang, Indonesia Dewi Retno Suminar, Nur Ainy Fardana Nawangsari Universitas Airlangga Surabaya, Indonesia ika.andrini.fppsi@um.ac.id

Abstract— In this disruptive era students should be taught how to construct knowledge so they can learn whatever new knowledge they need when changes occur in the world. One of the major skill to construct knowledge is the ability to draw conclusion about causal relationship, also known as control of variables strategi (CVS). A large number of research about CVS have been conducted but no evidence about factors affecting the performance in CVS tasks among middle school students in Indonesia can be found. This study aimed to examine the role of metacognitive knowledge, metacognitive skill, epistemological understanding, and intellectual values toward CVS. A number of 502 middle school students in one of the city in East Java completed control of variables strategy inventory, metacognitive awareness inventory, and the measurement of epistemological understanding and intellectual values. The results of multigroup analysis show that there are variation of contribution of metacognitive knowledge, metacognitive skill, and intellectual values to CVS between the different groups of school, gender, and age. Surprisingly, epistemological understanding consistently contribute to CVS among the different groups of students. Interventions to foster students' epistemological understanding will be needed to prepare students facing the changes and challenges in the future.

Keyword— Control of variables strategy, epistemological understanding, intellectual values, metacognitive knowledge, metacognitive skill

The Significance of Office Technology Interactive E-Module Based on Kotobee for Vocational High School

Yuli Agustina, Anifa Zuhra State University of Malang, Indonesia yuli.agustina.fe@um.ac.id

Abstract— The learning materials developed were interactive E-Modules based on Kotobee. This development is important due to an unavailability of media and instructional resources that assist in student comprehension. As such, this study aims at developing an E-Module which was validated by material experts, media experts, and media users. Furthermore, this research compared student learning outcomes before and after using the E-Module. This research was a variation on the Borg & Gall model of research and development (R & D), with nine steps that have been modified to meet the field's needs. The resulting product is an interactive E-Module based on Kotobee for the Office Technology course, which consists of five Fundamental Competencies. Validators and users of the instructional media indicated that the product is highly valid for use as a source of instructional materials. Cognitive and psychomotor outcomes were measured in this study. The normality and Mann-Whitney tests revealed a significant difference in the average learning outcomes between the experimental and control classes in both aspects of the assessment of learning outcomes. This demonstrates that the use of an interactive E-Module based on Kotobee for the Office Technology course is significantly effective and can be used as a medium of instruction and to improve student learning outcomes, particularly in class X Office Automation and Management at SMK Terpadu Al-Ishlahiyah Singosari-Malang.

Keywords— E-Modul, Learning Outome, Kotobee, Office Technology.

ABSTRACT THE 5TH ICLI 2021 AUTHORS (POSTER PRESENTATION)

Assessment of Students in Activities of Discuss Online Using Machine Learning

S Sunarti, Herri Akhmad Bukhori, Tiksno Widyatmoko State University of Malang, Indonesia sunarti.fs@um.ac.id ting hie ling Universiti Tekonologi Mara, Malaysia

Abstract— one of the evaluations of learning in online learning classes is an evaluation of student involvement activities in online discussions and explaining questions during discussions in online learning. The results of the assessment evaluation will be used and evaluated by the teacher to provide a learning evaluation in addition to the final score. This study evaluates students' online learning by looking at students' interactions in online discussions and answering questions during online discussions. To overcome this problem, this research uses machine learning where machine learning has high accuracy results in evaluating in the form of text results from online discussions. The data taken in the form of text from the results of online discussions are then given the weight of questions and student activities in online learning according to the training data. After testing 10 texts resulting from online discussions, an accuracy check was carried out to get 84.23% of the results of using training data. The way of testing uses 10-fold cross-validation, consistently under training data testing test.

Keywords: emotion, artificial intelligence, mobile application

Challenges Faced by Students in Becoming Digitally Fluent Amidst Covid-19 Pandemic: a Case Study of Uitm Pahang; a Public University in Malaysia

Sulaila Bakar, Azlini Razali, Zulkefli Mohamad UiTM Cawangan Pahang Kampus Jengka, 26400 Jengka, Pahang, Malaysia sulaila@uitm.edu.my Mazni Muslim UiTM Cawangan Pahang Kampus Raub, 27600 Raub, Pahang, Malaysia

Abstract— This paper examines the challenges students faced in ensuring effective learning process while incorporating digital technologies in the middle of COVID-19 pandemic. It was found that efforts of the Malaysian government, universities and educators to promote the Open and Distance Learning (ODL) were constrained and limited by numerous obstacles faced by the students. The main focus of this study was to identify the students' setbacks to their learning outcomes. Questionnaires through Google Forms were distributed to 92 students from four different faculties in Jengka and Raub campuses. The objective was to find answers to these four questions: students' perception, trust, emotion on ODL and the demand of becoming digitally fluent. The findings concluded that these students were overwhelmed by both their coursework and also their lecturers. The lecturers' expectation also played a big role in this difficult situation, forcing students to feel worried and pressured. Nevertheless, this study also found other contributing factors that impede their learning outcome; networking factors, family support and the students' perspective towards their studies. Based on the data collected, in-depth analysis, conclusions and recommendations were made in the hope that our findings could help them become better students, and the educators to be more reasonable.

Keywords: COVID-19, ODL, UiTM

Developing English Language Curricullum for Sharia Tourism Department

Sungkawati Kardi Wahyuningsih, Andika Hariyanto Surbakti IAIN Takengon, Indonesia kardisungkawati@gmail.com

Abstract— This research study was aimed at developing English language curriculum for Sharia Tourism Department of IAIN Takengon. This research was a Research and Development study that included the steps of situational analysis; aims, goals, and objectives; content; learning activity; and instructional evaluation. The curriculum were developed according to situational analysis. The developed curriculum gave positive impact in Gayo society. It was developed by competence team. The institution facilitated the process of the development. The teachers were suitable in proficiency and qualification. The learners were in homogenous background, proficiency, and preferred. The curriculum was adopted from the local values and beliefs. The presage curriculum was designed to improve the students' English language skills in promoting the Sharia tourism in Gayo. The content of the instructional was English language syllabus, material, and learning assessment. The learning activities were vary, as they reading, writing, listening, and speaking. The instructional evaluation was conducted by validation by some expert, in the aspects of the appropriateness of the aim, organization, content, skill, methodology, and outline. According to the experts' judgment, the instruction was appropriate. The product could be used as English for Specific Purposes in another field with assumption that the situation analysis were similar.

Keywords: English language curriculum, Sharia tourism, English for Specific Purposes

Development of Evaluation Tools Based on Android App on Electricity Engine Practicum Courses in Universitas Negeri Malang

Erwin Komara Mindarta, Emdi Ramadana Putra, Dani Irawan State University of Malang, Indonesia erwin.komara.ft@um.ac.id Safarudin Hisyam Tualeka Universitas Brawijaya, Indonesia

Abstract— This study aims to: 1) determine the process of developing an android application-based evaluation tool, 2) determine the feasibility of an android application-based evaluation tool, and 3) determine student assessments of an android-based evaluation tool. This study uses research and development methods by adopting and modifying the 4D development model. The product manufacturing and development activities are carried out through four stages, namely define (definition), design (design), develop (development), and dissemination (dissemination). Methods of data collection using non-test methods such as observation, interviews, and questionnaires. As for the data analysis technique used is descriptive statistical analysis technique. The research results obtained are: 1) the process of developing an android application-based evaluation tool is carried out through four stages, namely the define stage, curriculum analysis activities have been carried out, student characteristics analysis, material analysis, and goal formulation. Furthermore, the design stage has carried out media selection activities, making question packages, making android applications, designing product designs, and making initial products. Then the development stage has carried out product feasibility assessment activities and product trials on small and large-scale student groups. After obtaining the final product of the research, then at the dissemination stage, socialization and dissemination of the product were carried out to students. 2) the results of the product feasibility assessment by material experts are included in the very good category with a mean score of 3.34, by media experts are included in the good category with an average score of 3.08 (media expert I) and 3.09 (media expert II), and by the lecturer in charge of the course included in the very good category with an average score of 3.61. From the results above, it can be concluded that this android application-based evaluation tool is feasible to be used as an evaluation tool in teaching and learning activities. 3) the results of student assessments in small groups are included in the good category with an average score of 3.16. While the large group is included in the good category with an average score of 3.01.

Keywords: evaluation tool, engine electricity, android application

Learning Media Innovation for Early Childhood Based on Augmented Reality

Denik Ristya Rini, Agnisa Maulani W., Retno Tri W. State University of Malang, Indonesia denik.ristya.fs@um.ac.id

Abstract— the educational process is constantly changing. Changes that occur both in the learning process and in the way teachers teach. Currently, the daily learning process requires teachers to be more innovative and creative in delivering learning materials. One of the innovations provided by the teacher in delivering learning material is innovation in developing learning media used for teaching. Currently, technology is increasingly sophisticated. Many technologies, such as smartphones, can be used to deliver learning materials. This study develops a learning media based on Augmented Reality for early childhood. The method used is the ADDIE model. Before being used, the learning media developed were validated and tested. Validation is done by validating media experts and validating material. The trial was carried out with limited trials and research trials. From the results of the trial, an analysis was carried out to see to what extent the effectiveness of the developed learning media.

Keywords: innovation, learing media, early childhood, augmented reality

Learning Media for Vocational High Schools based on EPUB Contains Problem Based Learning to Increase Learning Independence in Computer Systems Subjects

Heru Wahyu Herwanto, Muladi, Muhamad Hakim Universitas Negeri Malang heru wh@um.ac.id

Abstract-- Vocational High School students are Generation Z who have the nature of liking independent learning by using digital devices. This study aims to develop, test the feasibility level, and determine the effect of e-pub-based computer system learning media on the level of student learning independence. The research model uses the ADDIE development model. There are three types of media testing, namely validity test, feasibility test and learning independence test. The results of the validation are, (1) material validation is 85.4%, and (2) media validation is 91.5%. While the results of the feasibility test obtained 86%. While the results of testing the level of student learning independence is 83.8%. The conclusions of this research are (1) the learning media developed is valid and feasible to be used in learning, (2) the use of this media results in the level of student learning independence in the high/good category.

Keywords: Problem Based Learning, Learning Media, Independent Learning

She's A Support System: Peer Assessment in Cooperative Learning Asynchronous Classroom in EFL Context

Sari Karmina, Sintha Tresnadewi, Lestari Setyowati, Ahmad Heki Sujiatmoko State University of Malang, Indonesia sari.karmina.fs@um.ac.id

Abstract—Peer assessment is essential in cooperative learning (CL). It helps teachers in evaluating the implementation of CL and the students' engagement particularly in asynchronous learning. However little research on peer assessment in CL asynchronous classroom has been reported. Thus, the study aims to explore the implementation of CL and the students' engagement in their group through peer assessment in CL asynchronous learning in the context of English as a Foreign Language (EFL) classroom. The study used quantitative method design employing closed and open-ended questionnaires. Thirty-two students participated. The open-ended questionnaire was analysed using thematic analysis. The findings from the closed-ended questionnaire revealed that more than 50 percent of the students actively worked toward group goals; showed sensitivity to the feelings of others and values the knowledge, opinion, and skills; and assisted the group to identify changes and gave encouragement for the group to act. Three themes were generated from the open-ended questionnaire: peer roles, peer dispositions, and peer contribution. These findings showed that the students implemented CL and engaged in their CL asynchronous classroom. Thus, the current study suggests that peer assessment is an effective tool to assess the implementation of CL and the students' engagement in their own learning particularly during asynchronous learning.

Keyword— Asynchronous, EFL, peer assessment, student-centred learning

Utilization of Interactive Multimedia to Improve The Reading Ability of Students with Mild Mental Retardation

Neny Yuniarti, Ediyanto Ediyanto, Mohammad Efendi, Asep Sunandar, Ahsan Romadlon Junaidi State University of Malang, Indonesia yuniartineny10@gmail.com

Dody Hartanto
Universitas Ahmad Dahlan, Indonesia

Abstract— The current study is a literature study that describes interactive multimedia in learning to read for students with mild mental retardation. The research used written sources from various peer-reviewed journal articles of good quality. Articles are selected according to the research topic collected from the Google Scholar database. Researchers reviewed 15 journal articles published in the 2015-2020 period with the topic of the role of interactive multimedia in learning to read for students with mild mental retardation. The study results show that interactive multimedia such as Universal Design for Learning (UDL), Kinect, Computer Assisted Instruction, Marbel mobile application, and pop-up books can increase the effectiveness of learning and reading skills for students with mild mental retardation. In addition, interactive multimedia can support interesting interactions and a fun learning experience between teachers, students, and learning.

Keywords: interactive multimedia, reading ability, student with mild mental retardation

Utilization of 3D Exploded View for Practice Automobile Brake System

M Ihwanudin, Sumarli, Syarif Suhartadi, Lutfi Nuril Anwar State University of Malang, Indonesia m.ihwanudin.ft@um.ac.id

Abstract— The research objectives developing 3D Exploded View on learning automobile brake system; integrating 3D Exploded View in the learning module; utilization of 3D Exploded View on the sipejar platform; The research method adopted the ADDIE model. The subject of research is student chassis control systems of automotive engineering program. Research result shown that development of learning media in car brake system learning was considered successful with score of 86%. Integration of the learning modules rated excellent with score of 83%. The effectiveness of learning media on the sipejar platform rated excellent with score of 87%. Inhibiting research factors is drawing parts brake system takes a long time. Automotive experts needed to adjust the original size of the brake system. The research concluded that utilization of 3D Exploded View learning media has a positive impact on the learning process. Media integration in the module was provide a learning experience for students. Utilization on the sipejar platform has a positive impact and encourages learning motivation. Suggestions from this research, development of 3D media Exploded View can enhance the learning experience. This media is appropriate to be used as an individual and group learning strategy. This media effectively integrated platform long distance learning.

Keywords: automobile, brake, exploded, view

PROGRAM SCHEDULE

The 5th International Conference on Learning Innovation (ICLI 2021)
Virtual Meeting, July, 29th 2021
07.00-17.00 WIB (GMT +7)
Hosted By Universitas Negeri Malang

Topic: Hall Meeting-ICLI 2021 Join Zoom Meeting Main Room: https://zoom.us/j/96218606525

Time	Programs	Incharge
07.00-07.30	Registration	MC
07.30-08.00	Opening Ceremony	(Ms. Putu Anindita
	Video Profile UM	Widhiya Putri)
	Video LP3	
	Indonesian National Anthem	
	Welcome speech by Chairman of ICLI 2021	
	Greeting speech by UiTM Perlis Branch	
	Prof. Ts. Dr. Mohd Azlan Mohd Ishak	
	Deputy Rector of Academic Affairs	
	Univerisiti Teknologi MARA Cawangan Perlis	
	Welcome speech by Rector of UM	
	Opening Prayer	
08.00-08.30	Keynote I	Moderator
	Prof. Gavin Thomas Lumsden Brown, M.Ed., Ph.D	Sari Karmina, S.Pd.,
	The University of Auckland (New Zealand)	M.Pd., Ph.D
08.30-08.40	QnA	,
08.40-09.10	Keynote II	Moderator
	Prof. Weishen Wu, PhD	Ms. Siti Sarina,
	Dayeh university (Taiwan)	M.App.Ling.
09.10-09.20	QnA	
09.20-09.50	Keynote III	Moderator
	Assoc. Prof. Dr. Mohammad Fadhili Yahaya	Habiddin, S.Pd,
	University Teknologi Mara Perlis Branch (Malaysia)	M.Pd, Ph.D
09.50-10.00	QnA	
10.00-10.30	Keynote IV	Moderator
	Dr. Eng. Muhammad Ashar, S.T., M.T.	Ms. Noorazalia,
	Universitas Negeri Malang,	M. Ed.
10.30-10.40	QnA	
10.40-10.50	Invited speaker: Anton Rahmadi, S.TP., M.Sc., Ph.D	
10.50-11.00	Invited speaker: Erlia Narulita, S.Pd., M.Si., Ph.D.	Moderator
11.00-11.10	Invited speaker: Dr. Razlina Razali and Dr. Farah Lina Azizan	Ms. Huzaifah,M.A
	(UiTM)	

11.10-11.20	QnA	
11.20-11.30	Invited speaker: Dr. Eng. Didik Dwi Prasetya, S.T., M.T.	Moderator
11.30-11.40	Invited speaker: Dr. Rida Oktorida Khastini	Saida Ulfa, S.T.,
11.40-11.50	Invited speaker: Dr. Latisha Asmaak Shafie (UiTM)	M.Edu., Ph.D
11.50-12.00	QnA	
12.00-13.00	Break	MC
13.00-13.30	Special Speaker	Moderator
	Dr. Rer. Nat. Suseno Amien	Ms. Norlizawati,
	Learning Innovation PMU IsDB	M.App.Ling
13.30-13.40	QnA	
13.40-14.40	Parallel Session 1	Moderator Room
14.40-15.00	Break	
15.00-16.00	Parallel Session 2	
	Break & Back to Hall Session	
16.00-16.30	Keynote V	Moderator
	Prof Stuart Kime	Sari Karmina, S.Pd.,
	Director of Education (United Kingdom)	M.Pd., Ph.D
16.30-16.40	QnA	
16.40-17.00	Closing	MC
	End	

PARALLEL GROUPS

	GROUP 1 Link Zoom: https://bit.ly/icli2021room1 or				
		Meeting ID: 967	8142 6227		
		SESSION	11		
1	13.40- 13.55	Eny Nur Aisyah (Universitas Negeri Malang)	Educational Communication Analysis: Bully, Facilitative, and Motivative in Indonesia Early Childhood Education		
2	13.55- 14.10	Tasdin Tahrim (IAIN Palopo)	Blended Learning Model "Gawi Manuntung" Based On Local Wisdom To Improve Critical Thinking, Creative Thinking, Problem-Solving, Analytical Thinking, And Logical Thinking		
3	14.10- 14.25	Muladi (Universitas Negeri Malang)	Development Of Audio Mixer Trainer Equipped Power Amplifier For Audio Video Engineering Courses In Electrical Engineering Educational Study Programs		
4	14.25- 14.40	Dr. Eddy Sutadji, M.Pd (Universitas Negeri Malang)	The Kirkpatrick Model Integrate With 4-Level As An Evaluation Design For The Implementation Of Vocational Educator Training In The 21st Century		
	SESSION II				
5	15.00- 15.15	Hariz Enggar Wijaya (Universitas Islam Indonesia)	Religiosity And Nomophobia Among Undergarduate Student: The Moderating Role Of Self-Control		
6	15.15- 15.30	Farida Rahmawati (Universitas Negeri Malang)	Implementation Of The Discovery Learning Model To Increase Student'S Interest In Regional Economics Courses		
7	15.30- 15.45	Nur Wahyu Rochmadi (Universitas Negeri Malang)	ASSESSMENT IN CHARACTER EDUCATION: The Praxis of Character Education in Mataraman Families		

Link Zoom: https://bit.ly/icli2021room2

or Meeting ID: 982 2226 3460 Passcode: 814953

	SESSION I				
1	13.40- 13.55	Elisabet Kenila (Universitas Negeri Malang)	Improving Expressive Communication in Children with Autism using Social Story and Picture Exchange Communication System		
2	13.55- 14.10	Komarudin (Universitas Negeri Malang)	Engine Management System Onboard To Improve Problem Solving Abilities		
3	14.10- 14.25	Ketut Rusmulyani (Badan Pengembangan Sumber Daya Manusia Provinsi Bali)	Technical Vocational Education and Training (TVET) Innovation dengan Model Pelatihan Berbasis Kompetensi dalam Mengembangkan Soft-Skill Sumber Daya Manusia		
4	14.25- 14.40	Ibnu Muthi (Universitas Islam "45" Bekasi)	Evaluasi Program Building Learning Power		
		SESSION	ı II		
5	15.00- 15.15	Ahmad Heki Sujiatmoko (Universitas Negeri Malang)	Efl Teachers' Professional Development Through Creative Prompt Writing For Building Children Characters		
6	15.15- 15.30	Maruff Akinwale Oladejo (Universitas Negeri Malang)	Technopreneurship Mindset: The Behavioural Intentions of Indonesian and Nigerian Undergraduates in an Emerging Society 5.0		
	15.30- 15.45	M.Rijal Tabir (Tadulako University)	Profile of Pattern Story Question Resulting Number based on Ability Level of		
7	10.40	Offiversity)	Mathematics Students Class VII SMPN 21 Bulubonggu		

GROUP 3
Link Zoom : https://bit.ly/icli2021room3

or Meeting ID: 994 8531 3990 Passcode: 890885

SESSION I

	SESSION I				
1	13.40- 13.55	Dewi Sabrina Meidyanti (Universitas Negeri Malang)	The Innovation of Hi-World Smart Book integrate with AR to accelerate the recovery of Covid-19 patients in the Disruptive Era		
2	13.55- 14.10	Soffy Septya Noviatin (Universitas Negeri Malang)	Fe3-xCoxO4PEGGO Nanocomposite from coconut skin waste for radar absorbing materials		
3	14.10- 14.25	Saida Ulfa (Universitas Negeri Malang)	Analyzing Student Perform Through Predictive Analytic In Moocs Learning Environment		
4	14.25- Irawan Dwi Wahyono (Universitas 14.40 Negeri Malang)		Emotion Detection At Comments In Media Of Online Learning Using Artificial Intelligence		
	SESSION II				
5	15.00- 15.15	Irawan Dwi Wahyono (Universitas Negeri Malang)	Text Mining For Clasification Material In Online Learning		
6	15.15- 15.30	Fahyuddin (University Of Halu Oleo)	Improving The Validity Of Multiple Choice Tests To Measure Students' Problem- Solving Ability Of Buffer Solution Concep On Online Tests		
7	15.30- 15.45	Didik Dwi Prasetya (Universitas Negeri Malang)	Investigating The Memory Retention In Extension Concept Mapping		
8	15.45-				

8

16.00

	GROUP 4				
	Link Zoom : https://bit.ly/icli2021room4				
		or			
		Meeting ID: 941 (6351 2322		
		SESSION	II		
1	13.40- 13.55	Refika (STAI Diniyah Pekanbaru)	Competency Development Of Islamic Education Lecturers With Asynchronous Learning During The Covid 19 Pandemic: Preliminary Research		
2	13.55- 14.10	Adirasa Hadi Prasetyo (STKIP PGRI Sumenep)	Effect Of Project Based Learning Model Based On Edmodo Application On Students' Learning Interest		
3	14.10- 14.25	Vita Ria Mustikasari (Universitas Negeri Malang)	Analyze Of Enhancing Students' Understanding Of Concepts In Learning Cycle 5E Integrated With Web-Based Formative Assessments		
4	14.25- 14.40	Dewi Handayani (Universitas Bengkulu)	The Development Of Organic Chemistry Teaching Materials 2 By Using Android-Based Stem Approach		
		SESSION	l II		
5	15.00- 15.15	Nur Hidayah (Universitas Negeri Malang)	Conceptual Development of Cybercounseling Skills Training Design For Middle School Guidance and Counseling Teachers		
6	15.15- 15.30	Nur Candra Eka Setiawan (University Teknologi Malaysia)	Experience Using A Five-Component Blended Learning Strategy During The Covid-19 Pandemic		
7	15.30- 15.45	Ahmad Mursyidun Nidhom (Universitas Negeri Malang)	The Integration Of Augmented Reality Into Mooc'S In Vocational Education To Support Education 3.0		
8	15.45- 16.00				

GROUP 5
Link Zoom: https://bit.ly/icli2021room5

or Meeting ID: 953 7243 5694 Passcode: 340453

SESSION I

1	13.40- 13.55	MOH. ILMANUL HAKIM (Universitas Negeri Malang)	The Development Of Virtual Laboratory On Qualitative Analysis Chemical Practicum Cation Group I And Ii Based On Multiple Representation With Internet Integrated		
2	13.55- 14.10	Kehinde Adekunle Adeyemo (University of Lagos)	Students' Perceptions Of Digital Pedagogy At The University Of Lagos, Nigeria		
3	14.10- 14.25	Nur Eva (Universitas Negeri Malang)	Student Self-Regulated Learning Strategies On Pandemic Covid-19		
4	14.25- 14.40	Husni Hanafi (Universitas Negeri Malang)	Conceptual Development of Online Psychological Assessment Training Design For Guidance and Counseling Teachers on The Academic Life of High School Students		
		SESSION	II		
5	15.00- 15.15	Dr. J. Priyanto Widodo, M.Pd. (STKIP PGRI SIDOARJO)	Development Of Assessment Instrument Through Quizizz For The 9Th Grade Students At Smpn 44 Surabaya		
6	15.30- 15.45	Suwarno (IAIN Takengon Aceh Tengah)	Islamic Boarding Schools and Human Rights Enforcement (HAM) Transmission of Cultural Values for Disabilities at An-Nur Islamic Boarding School Bener Meriah Aceh		
7	15.45- 16.00				

GROUP 6
Link Zoom : https://bit.ly/icli2021room6

or Meeting ID: 928 3771 3284 Passcode: 634556

_		 _		
_	ES	$\overline{}$		
•	_		N	

	SESSION I			
1	13.40- 13.55	Kiki Kharismaliyansari (Universitas Negeri Malang)	Development Of Android-Based Interactive Multimedia On Interaction Of Living Things With The Environment Topic For Seventh Grade Junior High School To Improve Student'S Learning Motivation	
2	13.55- 14.10	Cipta Estri Sekarrini (Universitas Negeri Malang)	Policy Directions For The Management Of Dhf In The City Of Palembang	
3	14.10- 14.25 14.25-	Cipta Estri Sekarrini (Universitas Negeri Malang) Habiddin (Universitas Negeri	Analysis Of Disease Distribution And Vulnerability Of Dhf In Palembang City Developing Digital Comic Media: A Platform	
4	14.40	Malang)	For Online Course	
	SESSION II			
5	15.00- 15.15	Heny Kusdiyanti (Universitas Negeri Malang)	Development Of Edu-Kit Media For Entrepreneurship Learning Based On Gamification Model Toward Disruptive Education	
6	15.15- 15.30	Wishen Wu (Da-Yeh University)	Pictures Don'T Lies: A Remedial Teaching Model With Augmented Reality For Chinese Radicals Learning	
7	15.30- 15.45	Rifqon Hakiki (Universitas Negeri Malang)	The Development of Learning Media based on Augmented Reality, Hologram, and Ludo Game on The Topic of Molecular Shapes	
8	15.45- 16.00			

Link Zoom: https://bit.ly/icli2021room7

or Meeting ID: 983 4502 2968 Passcode: 625006

_		 _		
_	ES	$\overline{}$		
•	_		N	

	SESSION I			
1	13.40- 13.55	Asia Febriana (Universitas Negeri Malang)	Development Of Virtual Reality-Based Learning Media On Chemical Bond Materials And Molecular Shapes For Grade 10Th Of Senior High School Students	
2	13.55- 14.10	Andreas Syah Pahlevi (Universitas Negeri Malang)	Anak Muslim Hebat Boardgame As Al-Qur`An Learning Media For Children	
3	14.10- 14.25	Andika Bagus Nur Rahma Putra (Universitas Negeri Malang)	Disruptive Learning Media Integrated E- Generator Practice System To Advance Self- Efficacy Learners Levels In Era Of Education 4.0	
4	14.25- 14.40	Husni Hanafi (Universitas Negeri Malang)	Identification Counselor-Student's Mind Skills As Their Metacognitions Level In Counseling Process	
	SESSION II			
5	15.00- 15.15	Riana Nurmalasari (Universitas Negeri Malang)	The Role Of Machine Element Applications (Mea) To Support The Implementation Of Distance Learning In Machine Element Course	
6	15.15- 15.30	Mahfudi Sahly (Universitas Negeri Malang)	The Innovation Of E-Mapping System Big Data Based On The Leading Potential Areas And Superior School Majors To Increase The Effectiveness Of Learning And National Policy Programs	
7	15.30- 15.45	Muhammad Ashar (Universitas Negeri Malang)	Visual Game Smoking Awareness Using Design Thinking For Acceptable Testing Kids Education	
8	15.45- 16.00			

GROUP 8
Link Zoom : https://bit.ly/icli2021room8

or
Meeting ID: 918 5022 1635
Passcode: 309397

_		 _		
_	ES	_		
•	_		N	

	SESSION I				
1	13.40- 13.55	Yuli Agustina (Universitas Negeri Malang)	The Significance of Office Technology Interactive E-Module Based on Kotobee for Vocational High School		
2	13.55- 14.10	Agung Nugroho Pramudhita, S.T., M.T. (Politeknik Negeri Malang)	Learning Management System to Improving Students Computational Thinking Skills with Assessment for Learning Method		
3	14.10- 14.25	Prasetiyo (Universitas Negeri Malang)	Effect Of Pbib Learning Model On Student'S Cognitive Skills		
4	14.25- 14.40	Indriati Nurul Hidayah (Universitas Negeri Malang)	Creative Conjecture: Abductive Reasoning To Generate Some Ideas In Algebra		
	SESSION II				
5	15.00- 15.15	Isnanik Juni Fitriyah (Universitas Negeri Malang)	Development of E-Learning Based on Augmented Reality (AR) On Reduction-Oxidation Reaction Topic		
6	15.15- 15.30	Fadhila Wahyu Putri (Universitas Negeri Malang)	Interactive Web Learning For Cad 3d Courses To Increase Special Practice Skill Of College Student In Pandemic Situation		
7	15.30- 15.45	Andreas Syah Pahlevi (Universitas Negeri Malang)	Learning Media Innovation Based On Artificial Intelligence Intregrated With Ubiquitous Learning		
8	15.45- 16.00				

Link Zoom: https://bit.ly/icli2021room9

or

Meeting ID: 477 930 5447 Passcode: ICLI2021

SESSION I

	13.40-	Dr. Muhammad Aiman Bin Arifin (Developing Ma-Prscb Competency – Based
1	13.55	Universiti Teknologi Mara (UiTM))	E- Learning Module For Postgraduate
			Research Students
	13.55-	Sapti Wahyuningsih (Universitas	Integrating Elements Of Gamification-Based
2	14.10	Negeri Malang)	Assessment Into Authentic Learning Of The
			Graph Theory Application Online Course
	14.10-	Ika Andrini Farida (Universitas	The Role Of Metacognitive Knowledge,
3	14.25	Negeri Malang)	Metacognitive Skill, Epistemological
3			Understanding, And Intellectual Values To
			Control Of Variables Strategy
4	14.25-	Aulia Herdiani (Universitas	Self-Assessment: Building The Brick Wall Of
4	14.40	Negeri Malang)	Non-Technical Skills For Accounting Students
		_	

SESSION II

	5	15.00-	Nanang Zubaidi (Universitas	I Prefer Asynchronous Now: Student's
	5	15.15	Negeri Malang)	Preference And Teacher's Accomodation
Ī		15.15-	Widya Kartika Aditya	The Development Of Educational Novel As A
	6	15.30	(Universitas Negeri Malang)	Source Of Self-Study For Senior High School
				Students On Radioactive Elements
		15.30-	Yudi Tri Harsono (Universitas	Disaster Education with Disruptive Virtual
	7	15.45	Negeri Malang)	Reality Media for Social Character
				Development of Indonesian Children
	0	15.45-		
	8	16.00		

Link Zoom :https://bit.ly/icli2021room10

or Meeting ID: 949 0779 8394 Passcode: 155398

SESSION I

SESSION I					
1	13.40- 13.55	Puteri Ardista Nursisda M (Universitas Negeri Malang)	Improving the Competency of Vocational Productive Teachers through Industrial Cooperation based on Regional Potential		
2	13.55- 14.10	Dr. Sintha Tresnadewi, M.Pd (Universitas Negeri Malang)	Assessing Speaking skill to Indonesian high schoolers who studied English as a foreign language in remote language learning context		
3	14.10- 14.25	Dewi Dewantara (Universitas Lambung Mangkurat)	Effectiveness of Using Games "Circuit:Logic Gate Puzzle.apk" as Scaffolding in Logic Gate Learning		
4	14.25- 14.40	Yessi Affriyenni, S.Pd., M.Sc (Universitas Negeri Malang)	The Effectiveness Of Contextual Problem- Solving Based Integrative Online Learning On Fundamental Physics For Higher Education		
	SESSION II				
5	15.00- 15.15	DENI AINUR ROKHIM (Universitas Negeri Malang)	Platform For Design, Writing, And Publication Of Scientific Articles Based On Class Action Research (Car) Integrated Internet Of Things To Improve Teacher'S Pedagogical Competence		
6	15.15- 15.30	Nova Ariani (Universitas Negeri Malang)	Eyl Teachers' Perceptions And Practices Of Assessing Creative Writing		
7	15.30- 15.45	Nur Hidayah (Universitas Negeri Malang)	Conceptual Development of Helper's Assessment Skills Training Design on Inmate's Resilience In L-Sima		
8	15.45- 16.00				

Group Poster Main Room ICLI 2021 Link Zoom: https://zoom.us/j/96218606525 SESSION I Azlini Razali (Universiti Teknologi Challenges Faced by Students in Becoming 13.40-Digitally Fluent Amidst COVID-19 Pandemic: 13.50 Mara Pahang Branch Raub 1 A Case Study of UiTM Pahang; a Public Campus) University in Malaysia 13.50-Denik Ristya Rini (Universitas Learning Media Innovation For Early 2 14.00 Negeri Malang) Childhood Based On Augmented Reality Dody Hartanto (Universitas Negeri 14.00-Utilization Of Interactive Multimedia 14.10 Improve The Reading Ability Of Students With 3 Malang) Mild Mental Retardation Utilization Of 3D Exploded View For Practice 14.10-Lutfi Nuril Anwar (Universitas 4 14.20 Negeri Malang) Automobile Brake System 14.20-Sunarti. S.Pd.. **MTCSOL** Assessment Of Students In Activities Of 5 14.30 (Universitas Negeri Malang) Discuss Online Using Machine Learning 14.30-Erwin Komara Mindarta Development Of Evaluation Tools Based On (Universitas Negeri Malang) Android App On Electricity Engine Practicum 14.40 6 Courses In Universitas Negeri Malang **SESSION II** Developing English Language Curricullum 15.00-Andika Hariyanto Surbakti, M.A 7 15.10 (IAIN Takengon) For Sharia Tourism Department 15.10-Sari Karmina (Universitas Negeri "She is a support system": Peer assessment 15.20 cooperative learning 8 Malang) asynchronous classroom in EFL context Learning Media for Vocational High Schools 15.20-Muhamad Hakim (Universitas based on EPUB Contains Problem Based 15.30 Negeri Malang) 9

Learning to Increase Learning Independence

in Computer Systems Subjects.

ABOUT ICLI

ICLI is an annual International Conference on Learning Innovation (ICLI) hosted by Universitas Negeri Malang, Indonesia in collaboration with the Islamic Development Bank (IsDB) and Indonesian Consortium for Learning Innovation Research (ICLIR). It aims to gather researchers, practitioners, students, experts, consultants, teachers and lecturers to share their insights and experiences on research not only in constructing innovations in learning but also the knowledge of learner's capability. The learners who are characterized as creative and competent by having the ability to understand what they have learned and capable of taking initiative and thinking critically. In addition, ICLI is organized on the basis of the trend in the 21st century, categorized by the increasing complexity of technology and the emergence of a corporate restructuring movement.