



ICOBL

INTERNATIONAL CONFERENCE
ON ONLINE AND BLENDED LEARNING 2019

PROGRAM BOOK

AUGUST 23-25, 2019

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Preface

Welcome to Universitas Negeri Yogyakarta (UNY) – Indonesia to attend the first International Conference on Online and Blended Learning (ICOBL 2019) held from 23th to 25th August, 2019. This conference which is organized by Graduate School UNY in collaboration with National Central University – Taiwan aims to bring together researchers, scientists, engineers, scholar and students to exchange and share their experiences, new ideas, and research results about all aspects of Online and Blended Learning, and discuss the practical challenges encountered and the solutions adopted.

The conference received more than 80 submissions from ten different countries which were reviewed by relevant experts through a double-blind review process. About 60 papers have been accepted for presentation at the conference and publications at the Atlantis Press which will be indexed by Scopus.

On behalf of the organizations, I would like to thank all the invited experts who delivered keynote speeches, the authors who contributed papers, the conference chairs, reviewers, technical committee and all committee members. Their high competence, their enthusiasm, their time and expertise knowledge enable us to prepare the high-quality program and helped make the conference a successful event. I believe that by this excellent conference, you can get more opportunity for further communication with researchers and practitioners with common interest in online and blended learning. I hope all of you have a wonderful time at the conference and also in UNY.

Conference Chair
International Conference on Online and Blended Learning
(ICOBL 2019)

ICOBL 2019

International Conference On Online and Blended Learning

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ICOBL 2019 Committee

International Conference on Online and Blended Learning
1st ICOBL Annual Conference

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3. Dr. Sugito
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- Conference Chair : 1. Prof. Herman Dwi Surjono, Ph.D
2. Dr. Ratna Wardani
3. Retna Hidayah, Ph.D
- Conference Co-host : Prof. Dr. Wu-Yuin Hwang
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16. Nur Hasanah, Universitas Negeri Yogyakarta, Indonesia
17. Indra Hidayatulloh, Universitas Negeri Yogyakarta, Indonesia
18. Arya Sony, Universitas Negeri Yogyakarta, Indonesia
19. Dr. Kristin Bundesen, Walden University, USA
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21. Assoc. Prof. Dr. Bengi Sonyel, Eastern Mediterranean University, Turkey

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3. Akhsin Nurlayli
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ICOBL 2019

International Conference On Online and Blended Learning

Conference Agenda

International Conference on Online and Blended Learning
1st ICOBL Annual Conference

Day 1 – Friday, 23 August 2019

Venue	Time	Activity
1 st Floor of Digital Library Building, UNY	13.00 – 16.00 WIB	Conference Check-in and Material Collections

Day 2 – Saturday, 24 August 2019

Venue	Time	Activity
1 st Floor of Digital Library Building, UNY	07.00 – 08.00 WIB	Conference Check-in and Material Collections (continued)
4 th Floor of Digital Library Building, UNY	08.00 – 08.30 WIB	Opening Ceremony <ul style="list-style-type: none"> Welcome speech by Conference chair Opening speech by Rector
	08.30 – 09.15 WIB	Keynote Speech 1 (Vicon) Prof. Dr. David Stein, Ohio State University – USA Topic: Innovation in Online and Blended Learning
	09.15 – 09.30 WIB	Break
	Plenary Session I	
	09.30 – 11.45 WIB	Keynote Speech 2 Prof. Tian Belawati, Ph.D. - Open University – Indonesia Topic: Issues of Character Education in Open University Keynote Speech 3 Prof. Dr. Zoraini Wati Abas, Wawasan Open University – Malaysia Topic: Online and Blended Learning for Innovative Distance Education Keynote Speech 4 Dr. Elizabeth Hartnell-Young, University of Melbourne – AU Topic: New Generation of Online Learning Space
1 st Floor of Digital Library	11.45 – 13.00 WIB	Break and Lunch
4 th Floor of Digital Library Building, UNY	Plenary Session II	
	13.00 – 14.00 WIB	Keynote Speech 5 Prof. Dr. Wu-Yuin Hwang, National Central University – Taiwan Topic: Innovation in E-learning Technology Keynote Speech 6 Nurkhamid, Ph.D, Universitas Negeri Yogyakarta – Indonesia Topic: Technology/Digital Affordance in blended learning

Venue	Time	Activity
	14.00 – 14.15 WIB	Moving to Parallel Session Room
1 st Floor of General Lecture Building, Graduate School, UNY	Parallel Session	
	14.15 – 15.45 WIB at Room #1	Parallel Session I, Chair: Suprpto, Ph.D. Six papers will be presented by their respective authors for 15 min each.
	14.15 – 15.45 WIB at Room #2	Parallel Session II, Chair: Nurkhamid, Ph.D. Six papers will be presented by their respective authors for 15 min each.
	14.15 – 15.45 WIB at Room #3	Parallel Session III, Chair: Dr. Ratna Wardani Six papers will be presented by their respective authors for 15 min each.
	14.15 – 15.45 WIB at Room #4	Parallel Session IV, Chair: Dr. Rahmatul Irfan Six papers will be presented by their respective authors for 15 min each.
	14.15 – 15.45 WIB at Room #5	Parallel Session V, Chair: Retna Hidayah, Ph.D. Six papers will be presented by their respective authors for 15 min each.
	15.45 – 16.00 WIB	Break
1 st Floor of General Lecture Building, Graduate School, UNY	16.00 – 17.30 WIB at Room #1	Parallel Session VI, Chair: Nur Hasanah, M.Cs Six papers will be presented by their respective authors for 15 min each.
	16.00 – 17.30 WIB at Room #2	Parallel Session VII, Chair: Arya Sony, M.Eng Six papers will be presented by their respective authors for 15 min each.
	16.00 – 17.30 WIB at Room #3	Parallel Session VIII, Chair: Indra Hidayatulloh, M.T. Six papers will be presented by their respective authors for 15 min each.
	16.00 – 17.30 WIB at Room #4	Parallel Session IX, Chair: Akhsin Nurlayli, M.Eng Six papers will be presented by their respective authors for 15 min each.
	16.00 – 17.30 WIB at Room #5	Parallel Session X, Chair: Prof. Herman Dwi Surjono, Ph.D. Six papers will be presented by their respective authors for 15 min each.

Day 3 – Sunday, 25 August 2019

Venue	Time	Activity
Depart from the lobby of Graduate School, UNY	09.00 – 16.00 WIB	City tour will be optionally held at the participant's expense (not included in the conference fee) and will be arranged by tour agent.

Note: The conference certificate will be awarded after all parallel sessions have been completed.

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Keynote Speech

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Prof. Dr. David Stein Ohio State University, USA

Professor David Stein is associate professor of Workforce Development and Education. His work centers on three elements important to the working adult, adult centered of formal learning organizations, i.e. post-secondary, access and availability, and use of formal learning opportunities. His recent research has focused on how working adult learners make decisions concerning participation, choice, and use of technology in learning settings (formal, nonformal, informal). His research interests include the following: Adult Development and Aging, Civic Education, Educational/Instructional Technology, Learning Technologies, Technology Integration, Technology Teacher Education, and Workforce Development and Education.

Speech Title: Mental Models, Transformative Pedagogy and the Failure to Adopt Teaching in the Digital Classroom

Abstract: Mental models shape the way instructors create images of the classroom and how teaching and learning happens. To infuse technology in the curriculum and to teach in the digital classroom requires a new and refined mental model. However, professional development workshops to develop higher education faculty in Indonesia as digital teaching advocates may not be effective. This paper's thesis is technology integration in the curriculum through workshops focusing on use of digital tools may not lead to sustainability of efforts in modifying the curriculum or to the development on online instruction. A failure to recognize cultural differences as well as the lived experience of the digital classroom can and does lead to failure to adopt and sustain the digital classroom. Four recommendations are presented for encouraging new mental models of the digital classroom.

Prof. Tian Belawati, Ph.D. Open University, Indonesia



Professor Tian Belawati is to be conferred the Honorary Doctor of Letters degree in recognition of her immense contributions to Open and Distance Learning (ODL) and her leadership in endeavors to bring higher education within the reach of everyone. She is a well-known figure in the international higher education field particularly for her work with ODL at Universitas Terbuka as well as for her various joint initiatives with other ODL players to bring global credibility to the field of ODL. For her contributions in open and distance learning, she has received several awards and accolades, namely the ‘Meritorious Service Award’ from the Asian Association of Open Universities (AAOU) in 2012, and recently the ‘Distinguished Individual Promoter of the ODL’ award from the African Council for Distance Education. Other honors bestowed include the GTP-Bappenas Awards for independent research, the IDRC-PanAsia Organization Award for both independent and collaborative research, and the Fulbright Award for senior independent research.

Speech Title: Character Education in Distance and Online Learning

Abstract: With the enhancement of IT infrastructure in Indonesia, the Government of Indonesia encourages higher education institutions to embrace online and distance learning (ODL) as parts of their learning system. It was believed that ODL can both increase the quality of learning and the reach of their educational services hence increase the national participation rates in higher education. Nevertheless, as character education is one of the most important aim in Indonesian education, many people doubt the capability of ODL in strengthening student character. Is it possible to build and strengthen character through learning process that is delivered at a distance? This presentation will discuss the nature of ODL and character education, as well as the strategy that can be used for strengthening students’ character in distance and online learning.



Prof. Dr. Zoraini Wati Abas Wawasan Open University, Malaysia

Professor Zoraini has been in academia for over 30 years and is currently at the Wawasan Open University in Penang, Malaysia where she actively promotes the importance and value of Student Engagement for student success. She has taught, researched, and contributed to the development of the University of Malaya, International Medical University, Open University Malaysia, Sampoerna University (in Jakarta). As Malaysia's e-learning pioneer, Professor Zoraini has been championing the need to use appropriate learning technologies and to design effective but efficient instruction for blended and online learning. She has contributed significantly to the development of open and distance learning since 2004. She has written over 800 articles as a newspaper columnist and has spoken as keynote and invited speaker around the world. Professor Zoraini was also a member of the ASEAN Cyber University Project. She was named second among the top 14 leaders in Educational Technology in Southeast Asia and received an Education Leadership Award in 2014.

Speech Title: Online and Blended Learning: Innovating for Distance Education

Abstract: Higher education institutions today are continuously facing new academic and interesting challenges. Disruptive technologies and increasing demands for both formal and informal learning have driven universities to go beyond the brick and mortar and the typical formal program structures. Students have been keen to enroll in MOOCs and, soon, micro credential courses that offer more flexible pathways to degrees. In addition, the general public are looking for opportunities to enroll in lifelong learning courses as they are motivated to continue learning or enhance their productivity. These developments are challenging universities in one way or another. How should courses be designed and delivered? How best is learning to be assessed? These are some of the pertinent questions university leaders and educators have asked. Such questions have become more important today compared to a decade ago. Educators today need to be competent and where possible, work in partnership with, for example, learning architects, instructional designers, and learning engineers to create courses that will attract students and produce the learning. In addition, how students are to be engaged in their studies and made more accountable for their own success are questions some of the questions asked. Many institutions have adopted blended and online learning. Some do it well while some are still experimenting. In order to be effective, educators need to stay current and be continuously creative and innovative so as to be able to create courses that attract and motivate students. The paper will address some of the questions and describe how an Open and Distance Learning institution has been innovative in combining the elements of both blended and online learning.

Dr. Elizabeth Hartnell-Young University of Melbourne, Australia



Dr. Elizabeth Hartnell-Young is an activist, researcher, writer and presenter with experience in schools and higher education. She is currently an honorary fellow in the Melbourne Graduate School of Education at the University of Melbourne. Her interest in physical and virtual spaces has led her to research the use of technologies and new learning spaces during periods of rapid development in these fields in England and Australia. A keen learner who has completed several massive open online courses, she also supports professional learning for educators. At the Australian Council for Educational Research, she led the registration, development and online provision of postgraduate courses, while she previously managed a large portfolio of projects relating to teaching and learning as Director of Research and Evaluation in the Victorian Department of Education and Early Childhood Development. In 2017, horrified by the continuing low proportion of women receiving Australian Honors, she co-founded Honor a Woman, aiming to achieve gender equality in the awards.

Speech Title: New Generation of Online Learning Spaces

Abstract: This paper considers the opportunities provided by online learning, giving school and university examples from Australia. It argues that while a technology infrastructure is necessary, the focus should be on knowing the learners and the actual learning that takes place. A learning progression, based on Milligan's (2012) research into Massive Open Online Courses (MOOCs) is discussed. Finally, the benefits that online spaces offer for learning analytics and educational data mining for knowing and assessing students are noted. Developments in technology infrastructure and devices have enabled us to create new learning spaces beyond the walls of a physical classroom, leading to what some call 'anywhere, anytime learning' (Houlden & Veletsianos, 2019) or extended learning. Online learning provides a range of opportunities that make it quite different from face to face learning. But, as this paper will show, there are also similarities if we focus on learning. Some of the terms in this space include online and elearning, distance learning, flexible learning, blended and flipped learning.



Prof. Dr. Wu-Yuin Hwang

National Central University, Taiwan

Professor Wu-Yuin Hwang is currently a distinguished professor of the Graduate Institute of Network Learning Technology, National Central University, Taiwan. Dr. Hwang has published lots of papers in major international journals indexed by SSCI, SCI and EI in the area of educational technology. He earned four best paper awards of 4th, 8th, 9th and 13th Global Chinese Computer Conference (GCCC) in Education in Singapore, Hong Kong, Hawaii and Taipei in 2000, 2004, 2005 and 2009 respectively. Owing to the outstanding contributions of research outputs to National Science Council, Taiwan, Dr. Hwang received the Ta-You Wu, Memorial Award from National Science Council in 2005. The major research interests of Professor. Hwang include human-computer interaction for collaboration, multimedia tools/systems design and knowledge construction. Regarding the recent publications of Professor. Hwang, there are around fifty journal articles published or accepted by SSCI journals in recent five years.

Speech Title: Innovation and Research in Educational Technology

Abstract: Based on statistical survey of publication performance of instructional design and technology in 65 SSCI high quality journals from 2007 to 2017, (<https://onlinelibrary.wiley.com/doi/pdf/10.1111/bjet.12712>), I am in top 10 of both rankings of the number of publications and their contributions. In the statistics, there are only 7 scholars in the world entering the both rankings and fortunately I am one of them, I am happy to get this honor, in top 7 scholars of instructional design and technology area in the world in terms of 65 SSCI high quality journal publication performance and contribution from 2007-2017. This is indeed a good encouragement in my academic career and hopefully I can continue and get more contribution and recognition in this area. In this speech, I will be addressed innovation and research in educational technology based on my recent 15-year research portfolio, particularly how to conduct innovative study in interdisciplinary, cross-disciplinary and self-experience aspects with team work. There are several categories of research innovation in educational technology addressed in this speech. Some examples of my publication will be shown and explained associated with these innovative research categories. I will also talk my research philosophy, time and team management in order to sustain my research performance and move them forward.

Nurkhamid, Ph.D. Universitas Negeri Yogyakarta, Indonesia



Nurkhamid Ph.D obtained his bachelor degree in Electronics and Instrumentation, Universitas Gadjah Mada (UGM), in 1983. He received his master degree in Computer Science (UGM) in 2004 and his Ph.D. degree in Computer Science and Information Engineering on 2007 from National Central University, Zhongli, Taiwan. He is a lecturer at Department Educational of Electronics and Informatics Engineering, Faculty of Engineering, Universitas Negeri Yogyakarta. He is interested in learning technology, technology enhanced learning, and e-learning.

Speech Title: Technology Affordance in E-learning: A Case of Google Classroom Platform and its Other Related Services

Abstract: Affordances represents the properties in an object. eLearning systems have specific affordances that without the systems, e.g., in traditional learning environment, the affordances are difficult or limited to realize. According to Bill Cope, the digital affordances include ubiquitous learning, active knowledge making, active knowledge making, multimodal meaning, recursive feedback, collaborative intelligence, metacognition, and differentiated learning. Another additional affordance, knowledge offloading, is proposed. Using these eight affordances, Google Classroom is chosen as an eLearning platform for the affordance's examination. It is examined whether these affordances exist in the platform or not. If the affordance exists, to what extent the existence of each affordance. The results show that, in Google Classroom, some affordances can be directly identified, whereas some other affordances are available by means of other web app extensions/services.

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Parallel Speech

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Procedural Model in the Development of Assistance Systems for the Proficiency Test for Competency in the Field of Information Based on Ubiquitous Learning

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Abstract. *Changes in technology require resources, and supporters must compete for resources power from the same source as another. Understanding how to connect various learning resources is as important as learning content because knowing what we need for tomorrow is more important than what we know today. Some journals are related to models which are a process of mindset and components contained in it, which are represented in the form of graphics and / or narrative. In the design of learning systems, models usually describe the steps or procedures that need to be taken to create effective, efficient and interesting learning activities. The Mentoring System carried out with a procedure model openly to carry out the proficiency test in the field of informatics is one alternative in learning solutions for the industrial revolution era 4.0. The Research and Development approach and the characteristics of the model developed in this article broadly combine 3 models of interrelated systems development between Borg and Gall models as backbone, Hanafin and Peck as a learning interaction process and the waterfall model as the creation of a mentoring application system. The final result of this article is the establishment of a procedural model in a digital learning system from national and international standard certification programs based on the Professions and Competencies provided by industry and associations. Procedural models are a form of the formation of an Assistance system that bridges the industrial world and campus-based Ubiquitous Learning.*

Keywords: Research and Development; Procedural Models; Ubiquitous Learning; Mentoring Systems; Information on Technology.

07

Developing a Learning Monitoring System Dashboard for Augmented Reality in Ubiquitous Geometry (Authentic-UG)

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Abstract. *The existence of Authentic-UG research on education with Augmented Reality (AR) technology to study geometry is a new phenomenon that is more real and authentic. The Authentic-UG requires a monitoring system to process the data produced on AR technology so that it can be displayed comprehensively with interactive data as a method of assessing student learning behaviour. The purpose of this study to develop a Learning Monitoring System Dashboard (LMSD), that can record and analyze student learning behaviour in the Authentic-UG learning mobile app. This is a research and development (R&D) with the method of agile Extreme Programming (XP). We use white box testing with unit testing and black box testing with the Unit Acceptance Test (UAT) to measure the system development. The result of this study, we created LMSD with a three-part of main architecture: data source, web service and consumer who can manage, monitor, and analyze the AR technology with the results of testing using Unit Test passed 36 scenarios of 36 (100%) and UAT passed 40 scenarios of 40 (100%) which means all functions on LMSD can work successfully. Finally, for the future of the LMSD also can be applied to another AR mobile app.*

08

Cultivating Junior High School Students' Critical Thinking Skills by Using Short-Videos in English Language Classroom

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Abstract. *An effective teaching method for cultivating students' critical thinking skills of junior high school students in Indonesia is very necessary as their critical thinking ability is still low. This research is descriptive study which aims at cultivating learners' critical thinking by using short-videos since it is believed that technology can motivate the students, increase their interest, engage them to the lesson matter, provide effective learning activities, and demand them to think critically and creatively. The subject in this study were 130 Junior High School students (SMP Negeri 1 Sedayu, Yogyakarta) grade IX. The students were homogeny in term of age, economic, and social background as well as in English language score. Facione's critical thinking rubrics were used to indicate the level of students' critical thinking such as their interpretation, analysis, evaluation, inference, explanation, and self-regulation skill of short video. The average score of all item in pre-test critical thinking skills was in fair level with the score 9 out of 20. The results indicate the students' interpretation skills were fair with the score of 9 out of 20; analytical skill was 12; evaluation skill was 9 out of 2; self-regulation was in fair criterion with the score of 5 out of 10 and good level of explanatory's skill with the score 6 out of 10, while 12 for inferences. It can be concluded that critical thinking skill of the students of Junior High School was still unsatisfactory as most of them can only reached fair level. The use of video cannot improve all critical thinking skills. It is recommended more practices to the students.*

Keywords: Critical Thinking; Short-videos; Junior High School.

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Adaptive E-Learning Model in Learning Personality Characters

Wartiningsih and Herman Dwi Surjono

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Abstract. *E-learning provides flexibility and convenience that has never been seen before for electronic learners by breaking the limitations of space and time. The design concern of computer-based learning systems is how to accommodate individual differences in students during learning activities. Previous research has shown that adaptive e-learning systems can effectively overcome these individual differences and, consequently, allow guidance to be more directed through computer-aided instruction. Personality of students may be significant in understanding the differences in learning outcomes from using e-learning systems. The results show that personality traits that can be indicative of preferred learning styles, especially extravert / introverted personal character significantly influence learning activities in adaptive e-learning systems. An e-learning guideline is in accordance with the character of the learner personality.*

Keywords: Adaptive E-learning; Personality Character; Learning.

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Evaluation of e-Learning Implementation in Gorontalo State University

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Abstract. *UNG has implemented online learning since 2006 wherein its implementation still in one Faculty namely the Faculty of Education and continued in 2007 PJJ PGSD began using moodle-based e-learning, in 2009 the Faculty of Engineering and especially the Informatics Engineering Department applying online learning using moodle and being followed by the Faculty of Economics and Business. In the academic year 2012/2013 online learning has been integrated with the integrated academic information system (SIAT) due to the increased interest in the use of e-learning This study aims to evaluate the implementation of e-Learning in UNG by analyzing the intensity of the use of e-Learning in SIAT and in two e-Learning based on moodle, besides analyzing the depth of the content of content that is in all these systems. The methodology used by this research is descriptive research. The results of this research are the level of effort, contribution to learning, skill, and responsiveness of the instructor are quite good based on data gathered from an online survey by the students who enrolled course of introduction to the computer network, design, and management of computer network, teacher's profession, and educational innovation. The intensity of utilization e-Learning on SIAT is experiencing ups and downs for the average of all courses. Most of the courses from each of faculty in e-Learning based on moodle have complete content including the forum, chat, online reference, glossaries, and course feedback.*

Keywords: Evaluation; SIAT; e-Learning.

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Relationship between Prior Knowledge and Internet Self- Efficacy on the Success of Learning Mathematics by Using E- Learning

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Abstract. *The development of technology, especially in the field of information technology, has greatly influenced the development of the world in all fields, including education. The teaching and learning process, which initially focused solely on teachers, has now developed into focusing on students. One of the impacts caused by technological developments in the field of education is the emergence of a new learning system called e-learning. E-learning is a learning strategy where all teaching and learning activities are carried out through the internet. There are two things that we examined in this study. First, we look for a relationship between preliminary knowledge (ability to use learning media) and self-efficacy (level of confidence) when using the internet to the success of e-learning learning methods. Second, we look for relationships between student strategies to search for information online with self-efficacy when using the internet. The subjects measured in this study were mathematics. Based on the research conducted, two conclusions were obtained. First, students' ability to use the internet and initial knowledge have an influence of 79.3% on student learning achievement. Second, there is a strong correlation between self-efficacy and the strategy of students searching for information online.*

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5 E-learning for Education in Indonesia

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Abstract. *The development of technology is a key factor in the change in the education system. One important issue in organizing the National Education System is determining what efforts should be made to improve the quality of education. This study aims to find out what e-learning is developing in Indonesia. At present, E-learning has been implemented in various schools or universities, institutions and industries. They combine two components: computer technology; computer network to do distance learning.. They allows students to learn through computers in their respective places without having to physically go or take classes. Currently it is widely used in Indonesia, especially for secondary schools, namely Edmodo, Schoology, Moodle, Quipper and Ruangguru.*

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Analysis of Maritime Learning Material Development Needs using Google Form

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Abstract. *Indonesia has great natural resource potential in maritime. Therefore, it is necessary to increase knowledge through education. The purpose of this study was to find out student perceptions of the development of maritime teaching materials. Research design used quantitative. The assessment instrument was developed by the researcher. Research subject of STKIP AL-Washliyah students in Banda Aceh. The results show that students needed maritime teaching materials to support lectures. Based on the results of the study, it can be used as a basis for analyzing the need to develop maritime teaching materials.*

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Using E-learning Based Schoology as Interactive Multimedia in Medium Education

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Abstract. *The development of information technology in the era of industrial revolution 4.0 grows very rapidly and sustainably in various sectors of life including the education sector. Utilization of the internet in the field of education continues to grow especially in the middle school. One of the interactive multimedia learning that accommodate those needs is e-learning. One of the learning model that utilize many information technology and internet network. Through e-learning, the learning process can not be continued by space and time because it can be done without the presence of face to face between teachers and learners. E-learning based on Schoology becomes one of the solutions for the education world to create more modern learning and can improve the quality of learning. This literature study is a study of the utilization of e-learning technology and information based on schoology in secondary education.*

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Perception of Teachers and Students About use E-book: A Technology Acceptance Model

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Abstract. *This study aims to determine the perceptions of students regarding the use of e-books in accounting learning, teacher perceptions regarding the use of e-books in accounting learning. This research is qualitative research with phenomenology research design. Determination of research subjects was carried out by purposive sampling. Data collection techniques are done by interview techniques. The validity of the data uses source triangulation. The research results of students and teachers are related to the technology acceptance model. smart vocational high school students and cheerful vocational high school students consider the use of e-books as technological advancements that can be used by students to get knowledge more widely and varied from various parts of the world. In addition, it is relevant to the rules of the government. Furthermore, it can be used to compete with students in other regions as well as students from other advanced countries, in terms of obtaining the same knowledge. Related to technology acceptance models in terms of technological progress related to self-efficacy and mobility, facilities. In addition, it is relevant to facilities, while variations are related to self-efficacy. Furthermore, Knowledge is related to self-efficacy and mobility. Finally, competitiveness is related to self-efficacy and mobility. Meanwhile, the perception of senior teachers and junior teachers regarding the use of e-books is to provide convenience in finding teaching materials and can provide broad insight to students. The use of e-books for teachers must be in accordance with needs, of course in combination with various other sources, but still relevant to the government. However, senior teachers think that the use of e-books will be efficient if they are in accordance with the age and age of the user. related to technology acceptance models in terms of variations relating to facilities. while insights are related to self-efficacy. Furthermore, it is relevant to the resistance to change. Finally, the combination relates to mobility. Another case, junior teachers in terms of convenience are related to self-efficacy. While the needs related to facilities.*

Keywords: Perception; E-book; Teacher; Students; Accounting; Technology Acceptance Model.

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Curve Audio Tracking Features for Tilawatil-Quran Learning Video

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Abstract. *Al-Quran is a holy book for Muslims who are perfect in terms of words and meanings. Reading the Qur'an with naghmah (song) has been preserved since the time of the Prophet Muhammad to the present day and has become an art called Tilawatil Quran or tilawah. At present many formal and non-formal educational institutions provide space to study Al-Quran. However, not all educational institutions provide teaching for the tilawatil Quran. In this Millennial Era, technology should facilitate tilawatil Quran learning. This study aims to produce tilawatil Quran learning media by applying Curve Audio Tracking. Curve Audio Tracking will visualize the naghmah rhythms (songs) read by Qari in the form of a fluctuating curve. This research uses the Research & Development method with the Multimedia Development Life Cycle (MDLC) development model. Curve Audio Tracking is successfully applied to tilawatil Quran learning media by converting sound into a keyframe. The results of this study indicate that the learning media of the tilawatil Quran by applying Curve Audio Tracking was successfully developed and got a score of 84.3% which is included in the category of Very Eligible and can be disseminated.*

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The State and Challenges of Technology Enhanced Learning in Cameroon's English Subsystem of Education: Case Study of Colleges

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Abstract. *Technology enhanced learning refers to the support of teaching and learning through the use of technology and can be used synonymously with e-learning. The thesis of this paper is that technology enhanced learning is still at its premature stage in Cameroon and that despite the rapid paradigm shift of traditional method of teaching and learning in the classroom to modern method of learning and teaching, many teachers still show great opposition to the current method and many student still practise the old style of learning. A brief online survey was done to find out to what extend some schools in Cameroon specifically in Bamenda, the capital city of the Northwest region have partially or fully incorporated the new system of technology enhanced leaning style such as the use of information communication technologies into their schools. From the results obtained, it was observed that many schools still practice the old system of learning mainly by using textbooks and lecture materials given by teachers for learning. meanwhile some of the teachers still maintained that they prefer the old method of teaching (in this case the chalk-chalk, textbooks, face to face approach etc) given that they lack the time, human and financial resources to train themselves on such a domain.*

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The Effectiveness of Enrichment E-module of Karangsong Mangrove Ecosystem to Improve Students' Scientific Literacy

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Abstract. *Karangsong mangrove forest is a potential ecosystem to be used as learning resource for ecosystem material. However, this ecosystem has not been used optimally for learning, and students' scientific literacy in Indonesia is categorized low. The aim of this study was to determine the effectiveness of enrichment e-module of Karangsong mangrove ecosystem to improve students' scientific literacy. This research is a development research with ADDIE research model (Analysis, Design, Development, Implementation, Evaluation). This study was conducted at SMAN 1 Sindang in the science class of tenth grade (XI MIPA). The subjects were 42 students selected using purposive sampling method. The instrument used in this study was a test of scientific literacy. The results revealed that the students' average scientific literacy in the experimental class was higher than in the control class, seen from the Mann Whitney test with a significance value $0.024 < 0.05$, and the N-gain score in the experimental class was higher than in the control class which is $0.51 > 0.36$. These results indicated that enrichment e-module of the Karangsong mangrove ecosystem is effective to improve students' scientific literacy.*

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Digital Game-Based Learning (DGBL) Model and Design Elements to Increase Student Learning Motivation in English Listening Skills

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Abstract. *English subject plays an important role in the era of information to be able to understand and adapt scientific progress globally. The lack of interactive learning resources in English teaching leads to low student learning motivation. Digital Game-based learning (DGBL) is a learning approach that utilizes games to make learning process more attractive and immersive. This research aims to propose the DGBL model and design elements to improving student learning motivation in English listening skills. This study uses field studies and literature reviews. The DGBL model are combined with the ARCS motivation model to increase student learning motivation. The DGBL design elements consists of four elements: interaction, content, level, and objective.*

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The Interactive Crimping UTP Cable Base on Android Smartphone to Improve Psychomotoric Abilities

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Abstract. *The purpose of this study was to create an Android-based 3D simulation learning media, and to know the practical value of students after using an Android-based 3D simulation learning media on network design subjects. The formulation of the problem in this study are: (1) How is the validity of 3D media for learning crimping UTP cable using the android platform. (2) What is the psychomotor abilities of students after learning using 3D media for crimping UTP cable using the android platform. This study uses a Pre-experimental models, with the design of the method used is the One Shot Case Study and the research method used is a Research and Development (R & D). This research is limited to the sixth stage items, namely: (1) the potential and problems of stages, (2) the stage of the data collection, (3) the product design stage, (4) the design validation stage, (5) the design revision stage, and (6) the trial product stage. The test subjects in this study were 30th grade students of TKJ 1 as many as 30 students. The results Showed that: The results of media validation results Showed 85.33%. Materials 93.33% Showed validation results. Question validation shows 84%. The overall results of the Recapitulation show that the level of achievement of this study falls into a very valid category in the scale of 81-100%. The practicum results of class XI TKJ 1 students after using android-based simulation learning media Showed that the completeness of students in working on practicum questions as much as 93.33% was declared complete while students who did not complete as much as 6.67%, and the average practice score 1 = 49, 5 from a maximum value of 55, practicum 2 = 41, 4 from a maximum value of 45 and the number of practicum 90.9 average results. With this, it can be concluded that students who complete the practicum more than students who do not complete and the number of practical values of students on average 90.9 above the KKM school with a value of 75, so it can be said that this simulation learning media is effective for students learning and showing the value of student practice is more than the KKM than students who are under the KKM.*

Keywords: Learning Media; Simulation; Cable Crimping; Peer to Peer.

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Multimedia-Based Fun Cooking Learning Model for Children Ages 5-6 Years

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Abstract. *Early childhood education is an important thing and cannot be ignored for the success of further education. One development in learning in PAUD which is very important is the ability of children's creativity. One that can improve children's creativity through cognitive and motorized activities is cooking class. The use of good and adequate fun cooking learning models is expected to stimulate the thoughts, feelings, concerns, and interests of children aged 5-6 years so that the learning process can run well and excite. This study aims to produce multimedia-based fun cooking learning models in the form of 3D animated video media and cooking demo videos to increase knowledge and skills for children aged 5-6 years. This research was conducted using the Research and Development (R & D) development research approach of ADDIE. Based on the results of the research that has been done, it can be concluded that the learning media has been said to be "Very Good" and "Eligible" and there is no negative response from students namely children aged 5-6 years. It is said to be very good and feasible obtained from the results of expert media assessment, material, and teachers and trials on children aged 5-6 years through small group trials (one to one evaluation) and limited group (small group evaluation).*

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Computer Assisted Language Learning Based Activities for Pre Service English Teachers` Digital Literacy Enhancement

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Abstract. *The computer, having various pedagogical characteristics and giving some benefits, has been utilized in teaching languages around the world. It affects the way we view teaching and learning, probably more than most educators admit. CALL-based activities provide the students with various activities dealing with digital learning. It directly facilitates the teaching process in digital era in order to support the pre service English teachers` digital literacy competences. This research aimed at exploring the use of the computer assisted language learning based activities in enhancing the pre-service English teachers` digital literacy. This explanatory study was conducted in English education study program, Universitas Baturaja and the participant was one lecturer and 22 pre service English teachers. The observation and interview were used to gather the data. The findings clearly presented that CALL-based activities guide the pre-service English to be more digitally literate in language teaching and learning and give effect to their digital literacy competences. It recommends to the pre service English are more participate actively to the changing of digital teaching era and be aware of their digital literacy competences.*

Keywords: CALL; Digital Literacy; Digital Teaching.

06

Developing A Web-based Accounting Competence Performance Assessment Rubric for Students At Vocational High Schools

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Abstract. *This study aimed at generating valid and reliable web-based accounting competence performance assessment among vocational high school student. In general, the development procedures that had been implemented were classified into two parts. The first part is rubric development, while the second part is web development. The procedures that had been performed consisted of four stages namely: preliminary study, design, experiment and revision, and implementation. The subjects in the study were 12 Accounting teachers, who also served as the raters for this study, from private vocational high schools. All raters were debriefed regarding the use of the assessment rubric. In performing data analysis for measuring the content validity, the researchers implemented an index that had been proposed by Aiken. Then, in measuring the reliability the researchers implemented the intraclass correlation coefficient (ICC). Due to the fact that the calculation results have been above the table results, the researchers would like to conclude that the rubric that has been developed has met the content validity. If the rubric is estimated by Alpha Coefficient, then its reliability will be excellent. If the rubric is analyzed by ICC, then it is reliable and it has high stability.*

Keywords: Development; Rubric; Web-based.

09

Teaching Through Words: The Instructional Syntax Analysis In Online Learning Environment to Engage EFL Students

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Abstract. *This paper aims to analyze the instructional syntax for an online learning environment in English learning. The data collection used lesson plans in a Spain-based English Academy. The research method used Hemphill's engagement criteria to find the syntax characteristic in the lesson plans instructions. Also, the study also analyzed the influence of learning theories in the online learning environment. The study revealed the frequencies of the instructional syntax used by EFL teachers and how these instructions engage the students. The lessons plans were coded to find the most syntax used, the engagement criteria, and learning theories. The result identified 'ask' is the most used syntax with 15.3% while inquiries method (38.9%) was using the most in teaching students online. Moreover, the application of cognitivism was dominance in the English online learning environment (40%). The data result shows how the engagement model can be used for English learners and will contribute to expanding the method of English language learning setting widely.*

Keywords: Instructional Syntax Analysis; Lesson Plan; Online Learning; Learning Theory; Students Engagement.

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Development of LMS Chamilo-Based E-Learning on Environmental Change Material for X Grade Senior High School Students

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Abstract. *The instructional delivery system in schools for long time have been a classroom with teacher giving speeches to students and the students listening and taking notes. The development of information and communication technology offers a new electronic-based learning system that can be applied to make instructional more interesting to students. So this research is aimed to produce an electronic based-learning system using LMS chamilo. E-learning developed sing R & D method with ADDIE model. E-learning device developed has reached the stage formative evaluation, with a feasibility score of 3.80 (very good) from material expert, 3.14 (good) from media expert, 3.67 (very good) from biology teachers and peers, and 3.27 (very good) from the result of the trial small group evaluation. From the result of e learning device feasibility test, it can be concluded that chamilo-based e-learning suitable for use in learning process.*

Keywords: LMS; Chamilo; E-learning.

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The Learners Perceive Electronic Feedback in Writing Multicultural Class Using Edmodo

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Abstract. *The study explores the learners' perceived of electronic feedback in writing multicultural class using Edmodo at the English Department of IAIN Palangka Raya. This is descriptive research. The participants are the L2 learners of three ethnic groups: Dayaknese, Banjarese, and Javanese, consisting of twenty-five learners. The instruments used to collect data are questionnaires and observation. The finding reveals that all ethnic group learners have a positive response on electronic feedback in an L2 writing class. Dealing with the types of feedback, most participants about ninety percent of dayaknese and eighty-six percent of Banjarese prefer to treat using electronic direct feedback. Meanwhile, Javanese about eighty- three percent prefer to treat using electronic indirect feedback. Dealing with the sources of feedback, most participants about ninety-two percent of Javanese and eighty percent of Banjarese prefer to be treated by teacher electronic feedback. Meanwhile, Dayaknese about eighty-one percent prefers to be treated by peer electronic feedback. It is suggested that language instructors pay attention to the students' cultural background in giving electronic feedback to learners.*

Keywords: Perceive; Electronic Feedback; EFL Multicultural Class; Edmodo.

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Factor Gender on Design Features of A Learning Management System in Higher Education

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Abstract. *This study aims to analyze how gender differences in the design features of the Learning Management System (LMS) in the context of blended learning in higher education. The method in this study uses quantitative research with the type of comparative research, in this case through the hypothesis test approach. Participants in this study were 223 students (111 men and 112 women) selected from two higher education institutions in Indonesia. Data were collected using the questionnaire, and for analyzing the data using t-test with $\alpha = 0,05$. The results showed that the assessment of male and female students did not differ significantly in relation to the design features of the LMS. These results can provide more understanding of the perceptions of male and female students on the design features of the LMS which are also an important part in achieving the effectiveness of blended learning.*

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Affinity Spaces, An Alternative Learning: Netnography Study on the Online Forum “Ibu Profesional Community”

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Abstract. *BKKBN in Government Regulation No. 21 of 1994 states that the family has eight functions, namely religion; socio-cultural; love; protect; reproduction; socialization and education; economy; and environmental coaching. To carry out its functions, family members need to be equipped with knowledge about the good and sensitive age family. In fact, this is not taught in Indonesian formal education. In families, fathers and mothers function as first and foremost educators for children, in addition to their role as husband and wife and community members. In carrying out this function, often fathers and mothers do not understand how to carry out their roles properly and balanced in family life. Through this study, the authors provide alternative learning resources for the application of eight family functions through increasing mothers capacity. Interestingly, this learning resource uses online social media that we use in daily life. The theory used for analysis is the participatory culture theory of Henry Jenkins and affinity spaces of James Gee, this theory accommodates the response of new media users to increase their knowledge and skills informally. The method is Netnography, a development from Ethnography. The researcher was involved in the IP community online and sharpened the analysis with in-depth interviews with interviewees from the Jogja IP Community. The research location was the Jogja IP Community, from January to May 2019. The study population was the Jogja IP Community, with the WA group sample Batch 7 Matriculation Class in 2019, Ratna Palupi (Jogja IP Leader) and Septi Yuwana (Jogja IP Homeroom Teacher). The results of the study show that the Jogja IP Community, which is an online learning community, has been able to invite its members to implement eight family functions that good and sensitive age, and automatically add their knowledge and skills.*

Keywords: Eight Family Functions; Participatory Culture Theory; Affinity Spaces; Online Learning Community.

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The Use of Edmodo Assisted E-learning on Learning Outcomes

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Abstract. *E-learning is one form of internet use in the field of education. This study of effective assisted e-learning on learning outcomes. this research is a quasi-experimental study. This study uses a Quasy-Experimental Research Design Design with Pretest-Posttest and Control Group. The method used to collect research data using tests and observations. Data were analyzed by the level of significance of 0.05. The determination of effectiveness criteria using the Ricard R. formula from H. The results of the study showed that there was a significant difference between groups of students in the control class and the experimental class. This is indicated by the sig value (p-value) <0.05. Judging from the gain value, the experimental class (g = 0.55) and the control class (g = 0.40). This means that the use of edmodo-assisted e-learning is more effective in improving learning outcomes than the control class.*

Keywords: E-learning; Edmodo; Learning Outcome.

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Digital Badges for Online Learning: is Worth it or not?

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Abstract. *Digital badges are a new breakthrough in the form of recognition of the skills or competencies someone has. In the digital age, openness to skills and competencies is an important factor. Because, anyone who has competence and / or competence in a field, he has the potential to be more often employed than those who do not have / cover their skills or competencies. We recognize that digital badges have promising projections in the future. Moreover, when digital badges are combined with online learning that carries the concept of lifelong learning. For this reason, we have compiled this paper to examine whether the combination of digital badges and online learning is beneficial for us.*

Keywords: Digital Badges; Online Learning; Credential System; Assessment System.

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An Architecture of Adaptive Online Module System based on Felder-Silverman Learning Style Model

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Abstract. *Students will get some benefits by knowing their own learning style. Adaptive online module system gives students a learning environment that adapting to their learning style. The architecture of the adaptive online module system consists of domain model, media space, student model, instruction model, adaptive model and user interface. The system identify student learning style using a questionnaire based on Felder-Silverman Learning Style Model (FSLSM). The stereotype of student learning style stored in student model. Adaptive model deliver the appropriate learning experience based on the student model. The adaptability is delivered in the form of adaptive content and adaptive navigation.*

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Effectiveness of Web-based Simulation integrated with Guided Discovery Learning (WBS-GDL) to Enhance Students' Critical Thinking Skills in Physics

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Abstract. *This study aimed to also assess the effectiveness of Web-Based Simulation integrated with Guided Discovery Learning (WBS-GDL) model in improving the critical thinking skill in Physics Grade XI students in Islamic State School Yogyakarta, Indonesia. The GDL-WBS model was compared to the Direct Instruction model (DI). The comparison of their level before and after learning was determined to assess the effectiveness of WBS-GDL and DL group. The level of students' critical thinking skill in these groups before and after they thought with the model was determined. Pre-test and post-test with experimental group design and descriptive comparative was used to processing data from 60 students. We uses ANOVA mixed design, independent sample t-test, and paired sample t-test to analysis data. The result of the study are (1) Level of students' critical thinking skill of both group before learning is generally very low and increased after learning; (2) there was a significant differences in the level of students' critical thinking skill in the WBS-GDL group with n-gain 0.42 (medium); (3) In this study, the WBS-GDL model improve students' critical thinking skill as 57.8% while DI only 6.7%. The conclusion of this study is WBS-GDL can be used to enhance students' critical thinking skill and more effective than DI model. For the next study, our recommendation is to assess other aspect of critical thinking skill with some learning model integrated simulation based learning.*

Keywords: Web-Based Simulation; Guided Discovery; Critical Thinking.

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Development of Web-Based Disaster Preparedness Knowledge Measurement Instruments Using the Wondershare Quiz Creator Software

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Abstract. *The high risk of natural disasters in Indonesia awakens all parties to the importance of disaster mitigation. One of such efforts is increasing disaster literacy ability. The purpose of this study was to develop a valid, reliable and practical disaster preparedness knowledge test. The research used research and development design from Plomp, which consisted of stages of identification, problem, development, and evaluation. Indicators of measuring disaster preparedness knowledge were taken based on a comprehensive literature study. Test items were then validated by material and language experts. The test was tested on Geography Education students using wondershare quiz creator. The results of the development was disaster preparedness knowledge test instruments that were valid with a value of 0,000 - 0,028, reliable with Cronbach alpha value of 0,970 > 0,306, difficulty level of questions in the medium category with a value of 0,53-0, 77, and the discriminating power of the category was good with the Pearson correlation value of 0.401 - 0.843. The students' response to the disaster preparedness knowledge test was considered very good with 86.25% satisfaction level. Based on the research conducted, disaster preparedness knowledge test instruments has a high level of validity, reliability, and practicality to measure the level of knowledge of student disaster preparedness.*

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Active and Interactive Learning Through Quizlet and Kahoot

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Abstract. *The use of learning media might adjust to the times and needs of students in this globalization era. Teachers are required to take advantage of technological developments in learning done with students. Today, the problems are about how to be able to realize active and interactive learning using modern technology-based. This can be done by applying to learn using Quizlet and Kahoot applications. The purpose of this study is to explain the advantages of Quizlet and Kahoot in an effort to realize active and interactive learning. The literature study was used in this study, the results showed that Quizlet and Kahoot were effectively implemented to realize active and interactive learning with the advantages of each feature in both applications.*

Keywords: Active Learning; Interactive Learning; Quizlet; Kahoot.

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Implementing Online Course Evaluation Rubric on e-Learning Ecologies: Innovative Approaches to Teaching and Learning for the Digital Age

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Abstract. *This paper is aimed to evaluate a selected online course and to make some adjustment. Thus, the online course can further be developed in better ways. The study is a qualitative research. The data were collected through documentation. The data were then analyzed using a set of evaluation criteria developed by Anstey and Watson (2018). The findings show that the assessed online course is considered as good as the results of evaluation. Hopefully, this study is going to be beneficial for both course developers and learners. For course developers, they are expected to design a good online course and for learners, by looking at the criteria, they can choose a good online course. Better online course will lead to better online education.*

Keywords: Online Course; Evaluation; Education.

05

The Implementation of “21st Century Listening Test”: An Assessment of Blended Listening in Higher Education

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Abstract. *The study was aimed at investigating the implementation of “the 21st century listening test” as an assessment of blended listening in higher education since listening, as the basic language skill, got less attention compared to others. Theories used as the indicators are: cognitive domain (Krahtwohl:2002), listening test type (Brown:2004), and listening processing (Richard:2008). It was a case study research design with 91 students of second semester taken using purposive sampling at Universitas PGRI Semarang. The data collected through documents review, test, in-depth interview, then, descriptively analysed as well as source and theory triangulation. The findings showed that top-down was way more difficult than bottom-up since the lowest average score was part D (9%), part C (26%), part B (30%) and part A (35%). After the test done, the result showed 13 students were excellent, 23 students were good, 40 students were adequate, 9 students were less adequate, and 6 students were failed. It evidenced the test can be implemented. The interview result said it created more excitement for the students. It might have implication to the development of alternative instrument to create more creative and innovative assessment items to proof that teaching listening can be interesting as well as challenging.*

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Enhance The Understanding Of Vocational School Curriculum Management Implementation Through Blended Learning-Based Training Supported By Learning Development Tool

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Abstract. *The aim of this research is to investigate the improvement of the understanding of vocational school curriculum management implementation using blended learning-based training by comparing the result of pre-test and the post-test. The samples which taken purposively are numbered 120 participants, consisted of 40 head masters, 40 school curriculum manager, and 40 teachers from 40 vocational schools in Kabupaten Bekasi. The method used in this research was participatory action research. The researcher categorized the samples into three classes where each class consists of 40 participants. The research is still on progress, this research is expectedly to show improvement to all the participants.*

Keywords: Blended Learning; Curriculum Management; Learning Development Tools.

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Innovation in Distance Learning

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Abstract. *Uneven education in Indonesia making access to quality and affordable education available only in the certain area. The solution that can be used to bridge the differences in the development of aspects of education in Indonesia is to use the Distance learning system. Distance learning system when planned to implement will take place on higher education environment such as university. The reason being is because higher education environment already implement both self-regulated learning and collaborative learning in their curricula eventhough the implementation is not fully implemented but still can be beneficial when distance learning system is choose to minimize the knowledge gap. Distance learning system can be succesfully implemented in educational environment if supprted by both internal and external factors. Internal factors will include but not limited to behavior of student and teacher. This will also influenced by self-regulated learning method from student and teacher behaviour on how they conducted their class. In conclusion, in order to fully implemented distance learning system, institution should prepare or introduce both self-regulated learning and collaborative learning in higher education environment since both of them play important role in the success of distance learning.*

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Blended Learning Controversy in Ma'had

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Abstract. *The presence of blended learning (BL) as an innovation in learning models and strategies for mahasantri is indeed undoubted. BL combine face to face and online learning (e-learning, electronic media/technology media) with certain considerations (goals and steps of use). BL can be done offline or online, synchronously or asynchronously. In its implementation, BL must pay attention into 5 important points: live events, self-paced learning, collaboration, assessment, and performance support materials. BL has 6 models: face-to-face driver model, rotation model, flex model, online lap model, self blend model, and online driver model. However, BL implementation in ma'had gave rise to a pro-contra among teachers regardless of the advantages of it.*

Keywords: E-Learning; Student Attendance; Academic Achievement; Higher Education; Blended Program.

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Quality Discussion in Blended Learning: Efforts to Improve Critical Thinking and Higher Order Thinking Skills

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Abstract. *The purpose of this study is to map the slices between the quality standards of discussion in blended learning with critical thinking skills and higher order thinking skills (HOTS). Furthermore, it is also aimed to identify the ability of students from the results of the mapping. This research is motivated by the fact that the application of blended learning in higher education. However, practitioners still ask question about the achievement of critical thinking skills and HOTS in the application of blended learning. The type of this research is survey research on the implementation of E-Learning Development course in the Educational Technology study program (N = 45). Discussion activities both face to face and online were assessed by using instruments in the form of discussion assessment sheets. Data were analysed by using descriptive techniques. The results obtained mean from coherent conceptions 3.20, fragmented conceptions 3.00, deep approaches to face discussions 2.90, and deep approaches to online discussion 3.15, surface approaches to face discussion 3.00, and surface approaches to online discussion 3.56. It can be concluded that the blended environment facilitated the development of critical thinking skills and HOTS because it combined the best side of face to face discussions with online discussion.*

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The Implementation of Blended Learning Model in State Budget Expenditure Treasurer Training in Ministry of Finance

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Abstract. *This study was conducted to analyse the implementation of blended learning by comparing online and offline learning in State Budget Expenditure Treasurer Training in Ministry of Finance. The blended learning was implemented through e-learning by independent learning in Kemenkeu Learning Center (KLC) platforms, while classical class were held after participants finished independent learning. The study used descriptive qualitative methods with primary and secondary data based on observations, documentation, and interviews with participants, facilitators, and training committee. In addition, it also used data from training monitoring and evaluation reports. The results of the study showed that the process of e-learning was not in accordance with the Term of Reference. Therefore, participants have not optimally carried out e-learning (independent learning), whereas there was good communication and effective learning process in classical learning so that the results of participants evaluations showed that all of them passed the training exam.*

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Analysis of Character Issues in Blended Learning

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Abstract. *The implementation of learning that is no longer limited by time and place, is one of the main reasons for expanding opportunities for access to education for everyone. Distant education with blended learning is one of the common ways in education in the xxi century. In fact, it can be said, with the right theory of education philosophy, blended learning is not only oriented to the transfer of information from lecturers to students, but also the implementation of interactive lectures and can build character for students.*

Keywords: Blended Learning; Education; Character Building.

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The Effect of Mastery-based Blended Learning on the Independence and Creativity of Students

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Abstract. *Blended learning is a combination of online learning and direct learning. One type of blended learning is mastery-based blended learning. The purpose of this study was to determine the effect of using mastery-based blended learning and conventional learning on students' independence and creativity and to find out the increase in students' independence and creativity by using a mastery-based blended learning model on basic graphic design subjects. This research uses a quantitative approach to the quasi-experimental research method. The population used was class X students majoring in TKJ SMK N 1 Sawit Boyolali by collecting data using questionnaires and evaluating using observation sheets. The results showed that mastery-based blended learning had an influence and could improve the independence and creativity of students.*

Keywords: Blended Learning; Mastery Learning; Creativity; Independence.

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The Influence of Project-based Blended Learning Towards Outcomes Student Learning

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Abstract. *The research aims to determine if there are any differences in the use of the Project-Based Blended Learning (PjB2L) method that Edmodo assisted with the repository learning model on student learning outcomes in graphic design lessons. The method used in this study is quasi-experimental quantitative. The population in this study was 60 students, consisting of 30 students using learning project-based learning methods mixed (experimental classes) and 30 students did not use a mixed project-based learning Method (control Class). The data collection techniques used are test study results, namely pretests and posttest which is a question of multiple choice. This pretest and Posttest is given to the control class and experiment class. The results of the study in the calculation of posttest results resulted in Sig. 0.000 which means that the value is less than 0.05 so H0 rejected and H1 accepted. Thus, it can be concluded that the results of the research received there are any differences in the use of the Project-Based Blended Learning (PjB2L) method that Edmodo assisted with the repository learning model on student learning outcomes in graphic design lessons.*

Keywords: Blended Learning; Project-based Learning; Project-based Blended Learning.

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Application of Blended Learning Method Based on Edmodo Application Towards Students Interest in Study of Digital Simulation Lesson Class X Vocational School 1 Pundong

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Abstract. *This research was conducted to determine the learning interest of students in the class X Digital Simulation subjects of N 1 Pundong Vocational School towards the application of Blended Learning methods based on Edmodo Application. The subjects of this study were the teaching teachers of Digital Simulation subjects and class X of SMK N 1 Pundong. The research data was obtained based on observations of the teaching and learning activities in the classroom and the responses of teachers and students to the application of the Edmodo-based Blended Learning method. Analysis of data obtained based on learning that applies the Blended Learning method based on Edmodo application is the number of student responses that strongly disagree 0%, disagree 3.06%, doubt 8.94%, agree 48.00%, and strongly agree 40.00%. It is known that the highest response is agreed and from an overall response of 81.60% with a very good category.*

Keywords: Interest; Edmodo application; Blended Learning.

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Hybrid Learning Development to Improve Teacher Learning Management

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Abstract. *Teacher learning management is an important part of achieving the process and results within the scope of Education. In addition, the development towards technology optimization is called era 4.0 as globalization which is part of the sustainability of innovation in 21st Century Education. Therefore this study aims to develop and investigate hybrid learning methods for teacher learning management. This research and development has passed the feasibility validity test with a score of 43.5 in the excellent category by media experts and 53.5 in the good category by material experts. This study involved 41 of them 9 teachers and 32 students at the Community Learning Center (PKBM Package-C) in Ciamis District. The results showed a positive response to teacher learning management with a score of 125 in the good category.*

Keywords: Hybrid Learning; Online Learning; Education 4.0; Learning Management; Instructional Design.

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A Model of Online and Blended Learning's Strategy of Classic Book and Foreign Language in Pesantren

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Abstract. *This paper aimed to discuss an idea and interpret about the model of online and blended learning implementation strategy of kitab kuning (classic book) and foreign language in Pesantren (islamic boarding school). This research focused on the blended learning implementation strategy and models in modern and traditional Pesantren. This research was qualitative study, with results showed that : 1) the blended learning model in learning Foreign Language of Modern Pesantren was used a Rotation model with an approach that students work in groups with the amount determined by the teacher and in a separate class, but still in one location under small group learning they do peer to peer activities, face to face teaching with a teacher becomes a mentor with online learning; 2) The model of blended learning strategy of kitab kuning in Traditional Pesantren, conducted with a flipped class room, because the learning done directly, face to face with "bandongan" method and linked to YouTube and facebook for streaming. 3) the blended learning implementation strategy was based on Kyai's policy as a top pesantren leader and target of the group.*

Keywords: Model; Implementation; Online and Blended Learning; Strategy; Classic Book; Foreign Language; Pesantren.

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Automatic Grading System to Support Blended Learning in Basic Programming Practice – an Experience Report

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Abstract. *Problems in teaching programming are widely known. Research on teaching programming continues to be carried out, both theory and practice. Especially on practical teaching, the important thing is emphasized that students must practice consistently and discipline. The problem is that not all programming tasks can be assessed because it takes a long time. This situation will causes students to be apathetic or stop programming. An automatic grading (AG) in teaching programming practices is an alternative to overcome this problem. AG checks the program for assessment, directly. Integrating AG with the learning management system (LMS) helps teachers evaluate. The use AG in blended learning (BL) is implemented in five of activities: profiling students, determining the material, designing questions, assessment-evaluation, and providing feedback. The effectiveness of BL is seen in two ways: quantitative and qualitative. Quantitatively, students who do the exercise continuously and discipline, have good in skills and final evaluation results. Qualitatively, more than 90% of students state that they enjoy practicing, are motivated to do tasks, and are greatly helped in the learning process. This article is an experience report on the use of AG in applying BL for teaching programming practices.*

Keywords: Blended Learning; Automatic Grading; Teaching Programming Practice; Feedback; Assessment and Evaluation.

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Blended Learning: Perception and Achievement of Postgraduate Program Students of Yogyakarta State University

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Abstract. *This study aims to describe blended learning in terms of perceptions and achievements of postgraduate program students of Yogyakarta State University (UNY). The perception includes satisfaction, convenience, and involvement. This study used a survey method. The population of the study was all postgraduate students of UNY who had used blended learning. The sampling technique used random sampling with a total sample of 123 postgraduate students. The instruments used included questionnaires and documentation. Data were analyzed using quantitative descriptive. The results show that the respondents agreed with the items on the satisfaction dimension, namely learning with the blended learning system increased understanding of their core concepts, and students were motivated to succeed. Meanwhile, on the convenience dimension, student perceptions are more diverse. However, there are three items in a broad category, where blended learning can make time and costs efficient, feeling isolated, and video material that helps them in different relationships. In the last dimension, the involvement, the most prominent is the better quality of interaction with fellow friends.*

Keywords: Blended Learning; Perception; Achievement; Satisfaction; Engagement; Convenience.

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Blended Learning on the Development of Instructional Videos to Improve Abilities in Learning about Concepts and Procedures

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Abstract. *One of the problems students deal with in developing the skills to learn about concepts and procedures in the material development of instructional videos is the lack of initiatives to search for and to determine concepts and procedures to develop instructional videos. Therefore, a learning scenario is necessary to instil the idea of learning early and regularly at the beginning of non-face-to-face session, followed up by face-to-face session, and resumed to non-face-to-face session. One of the learning models that are able to give students an opportunity to perform experimental learning is blended learning. This study aims to 1) develop the management of blended leaning-based materials and activities, 2) discover the effectiveness of blended learning. The development of management of materials and activities adopts the Absorb-Do-Connect (ADC) model of learning. At the absorb stage, the activities include reading, watching, and listening. At the do stage, the activities include answering, deciding, building, organizing, searching, games, simulations, and scenarios. At the connect stage, the activities include case studies, planning, reflections, and taking notes. The results of the analysis show that the model of management development of materials and activities had fulfilled the utility and accuracy of building knowledge of concepts and procedures effectively.*

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Blended learning: Analysis of Online Discussion Forums in Constructing English Knowledge through Collaborative Learning in Indonesia Context

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Abstract. *The thing that people tend to follow today is sharing life stories and communicating with other through digital line. It affects the way people see, think and learn the present environment, and connect with others. To seek the changes that affect them, an effort had been done. It is online discussion forums which provide the student teachers (ST) with a chance to manage the way they see, learn, share, and response to theme based discussion with their own way of interaction. Thus, this study revealed ST analysis of online discussion forums (ODF) in order to investigate if there is evidence how ST constructs their knowledge in English skills such as reading and writing through collaborative theme-based discussion in blended learning (BL). This study examines the data of ODF in undergraduate level. The findings show that they eager to learn the new theme-based discussion by clicking the given link, sharing their comments, and giving feedback to others' posting. Therefore, it plays as evidence how ST changes while in ODF. The analysis reveals that there is various order of thinking based on IAM model.*

Keywords: Blended Learning (BL); Online Discussion Forum (ODF); Content Analysis.

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The Implementation of Blended Learning Model Integrated Flipped Classroom to Increase the Motivation of High School Students

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Abstract. *Education is a process to foster students to become real human beings. The 21st century is a century where educators are no longer the only source of knowledge that students must accept. The position of the educator is the same as the position of the learning media which is only a facilitator. In its development in the world of Education today there is still no development of a strong model that can effectively implement online learning, on the other hand, the development of online learning technology has been very socialized to each school. Educators are still bound by the classical method (lecture method) because they do not understand the model in applying the digital learning process, so educators are still fixated on the comfort zone in classical education. The challenge of this era is that vocational students are required to work more effectively and efficiently, can apply the right technology, think critically, and be able to create the latest inventions, especially in the field of appropriate technology that provides effective and efficient impact on everyday life. -days, this is supported by the current curriculum which places students at all levels in the manufacturing stage.*

01

Differences Of Learning Results Using Problem Based Learning Reviewed From The Creative Thinking Level

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Abstract. *Changes in technology require resources, and supporters must compete for resources power from the same source as another. Understanding how to connect various learning resources is as important as learning content because knowing what we need for tomorrow is more important than what we know today. Some journals are related to models which are a process of mindset and components contained in it, which are represented in the form of graphics and / or narrative. In the design of learning systems, models usually describe the steps or procedures that need to be taken to create effective, efficient and interesting learning activities. The Mentoring System carried out with a procedure model openly to carry out the proficiency test in the field of informatics is one alternative in learning solutions for the industrial revolution era 4.0. The Research and Development approach and the characteristics of the model developed in this article broadly combine 3 models of interrelated systems development between Borg and Gall models as backbone, Hanafin and Peck as a learning interaction process and the waterfall model as the creation of a mentoring application system. The final result of this article is the establishment of a procedural model in a digital learning system from national and international standard certification programs based on the Professions and Competencies provided by industry and associations. Procedural models are a form of the formation of an Assistance system that bridges the industrial world and campus-based Ubiquitous Learning.*

Keywords: Research and Development; Procedural Models; Ubiquitous Learning; Mentoring Systems; Information on Technology.

02

Bad Reading Habit Severs College Students' Academic Writing

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Abstract. *For a college student, reading and writing are very necessary for the success of their studies. Bad reading habit can severe their knowledge and comprehension in their field of subjects. We designed a correlation study with fifty-two master students of English Language Education at Universitas Ahmad Dahlan, Yogyakarta to test how severe the writing skill caused by lack of reading skill. The questionnaires "The European Writing Survey (EUWRIT)" was administered. The data were analyzed by using SPSS including One-Sample Kolmogorov-Smirnov Test, ANOVA, and Pearson Product Moment correlation coefficient. Writing samples were also collected from them to find the major problems in their writing. The results show that the reading habits and writing skills of the students are in the medium or at the neutral levels. The Product Moment correlation is = 0.610, it is higher than r table value with the Sig 0,000 < 0.05 (rxy= 0.610 > (rt) = 0.304). Moreover, based on the calculation of the t-test, it is found that the value of t observe = 5.58 and it is higher than t table (1.70). F score is 352,524 at the significant 0,000 ≤ 0,05. Thus, reading habits have a significant influence on writing skill. The coefficient determination (R) was 87,6 % meaning that reading habit has 87.6 % contribution to their academic writing skill. Major problems of their writing are grammar, syntax, vocabulary, and paragraph development.*

Keywords: Academic Reading; Academic Writing; College Students; Major Problems.

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ANALYZING STUDENT ATTENDANCE AND ACADEMIC ACHIEVEMENT FROM STUDENT EXPERIENCE IN HIGHER EDUCATION BLENDED PROGRAM

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Abstract. *E-learning has been widely applied in higher education institutions to provide opportunities for students to learn anytime from anywhere. Blended program as a form of e-learning program design is developed to facilitate a mixture of offline and online courses. Given the nature of blended program design, researchers can gain opportunity to study e-learning implication in the context of comparing offline and online classes. Such study is beneficial to contribute into literature that still needs evidence towards the implication of e-learning, in particular the comparison between offline and online learning. This research makes an attempt to study student attendance and their academic achievement in blended program. Assessing student experience in a blended program enable researchers to explore student attendance in online and offline classes. In addition, this study also gain opportunity to relate the student attendance into their academic achievement in order to analyze the implication of e-learning into academic result. Research data is gathered from blended program in M.H.Thamrin University Jakarta that offers offline and online classes in three different study programs. Research findings show there are differences in student attendances and their academic achievement across offline and online classes. Those findings indicate the advantages and disadvantages of e-learning application in higher education.*

Keywords: E-Learning; Student Attendance; Academic Achievement; Higher Education; Blended Program.

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Analysis of E-Learning Implementation at Vocational High School Using Technology Acceptance Model (TAM)

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Abstract. *The aims of research is to determine the perception of student acceptance of a implementation technology of e-learning, and analyze effect of e-learning application on school policies using the Technology Acceptance Model (TAM). In detail, this study will evaluate implementation of e-learning schoology and moodle. The research method used is a qualitative research method and uses a descriptive approach. The population in this study were 71 students and 4 teachers with details of 36 students with the implementation of e-learning, 35 students without the implementation of e-learning and 4 teachers in the TKJ department who used e-learning. Taking research subjects using purposive sampling technique, which is taking conditional samples that meet the criteria that have been determined to be taken. Data analysis used descriptive analysis and analysis from Miles and Huberman. The results showed that respondents received e-learning from perceptions ease of use and benefits. E-learning is considered to influence the attitudes and behavior of students who are improving. For example they are more disciplined in collecting assignments and more diligent in learning. Therefore e-learning needs to be used as a support for conventional learning at SMK Negeri 1 Sawit Boyolali by preparing e-learning first and preparing teachers by doing training or introduction to e-learning.*

Keywords: E-learning; Schoology; Moodle; Technology Acceptance Model; TAM; Traditional Learning.

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Prediction Analysis Student Graduate Using Multilayer Perceptron (MLP)

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Abstract. *Student graduation data is a data that is important to the College, especially for the Faculty as well as the courses in question. Acquisition of knowledge in a database (a number of large data) commonly referred to as data mining. This research aims to analyze the student's graduation predictions that can be done on a fourth semester using Multilayer Perceptron (MLP) classifier which available in WEKA software implementations. Then do the testing and performance comparisons of MLP against Naïve Bayes classification, IBk and Tree J48. Cross Validation and Percentage Split are used as the testing procedure in this research. The parameters in the process of testing using correctly classified instances and Root Mean Squared Error (RMSE). On the mode of Cross Validation, MLP has better performance compared to all contender methods with accuracy of J48 81.82% and the value of the smallest RSME i.e. 0.273. On a Percentage Split MLP mode has the same accuracy value with Naïve Bayes i.e. 92.31%, and the value of the RMSE on the MLP of 0.182.*

Keywords: Multilayer Perceptron (MLP); Data Mining; Correctly Classified Instances; Root Mean Squared Error (RMSE).

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The Influence Factors of Employability Skills for Student in Vocational High School at Mechanical Engineering Program

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Abstract. *This study aims to find out the significance of the direct effect of industrial work practices on work readiness, vocational competency, and employability skills, the direct effect of work readiness on employability skills, and the direct effect of vocational competency on employability skills. The significance of the effect founds was expected to enhance the knowledge and consideration for developing employability skills vocational high school (VHS) students especially at industrial work practice, work readiness, vocational competency at vocational high school. The research used quantitative approach with ex-post facto type. The data were analyzed quantitatively to test the formulated hypothesis. The research was conducted at State and Private Vocational High School in DIY. The study population was grade XII students majoring in mechanical engineering. The research samples were 444 student who were selected using proportionate stratified random sampling. The data collection techniques were questionnaires distribution and documentation. The content validity was established using expert judgment. The construct validity was established using analysis factor by Kaiser Meyer Olkin Measure of Sampling Adequacy (KMO MSA) with value of 0.691. The reliability of the research was judged using cronbachs alpha with value for work readiness of 0.921 and employability skills of 0.864. The data analysis technique used path analysis. The result showed that employability skills can be improved through effective implementation of industry work practice, good training work readiness, and vocational competency based technical skills and non-technical skills.*

Keywords: Employability Skills; Industrial Work Practices; Work Learning Readiness; Vocational Competency.

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Students' Self-Monitoring Skill Classification in Learning Activities

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Abstract. *Intelligent Tutoring System (ITS) provides personalized instruction based on the level of knowledge and learning preferences of students. At ITS, student modeling has an important role; the role of student modeling in ITS includes student knowledge that is used to produce lessons, problems, feedback, and personalized learning guidance. ITS have the potential to develop into metacognitive tools. One of the metacognitive strategies is self-monitoring. Self-monitoring is a metacognitive strategy that students possibly control their learning activities. Developing an ITS with metacognitive needs rules for the treatment. The rules in ITS are from the classification method. This study focus on self-monitoring skill as the metacognitive strategy to develop ITS. This paper will provide a method which can classify students' self-monitoring skill. Bayesian network is used as a method to classify students' self-monitoring in this research. The result shows that the Bayesian network can classify students' self-monitoring skill accurately. The accuracy result for the classification is 94%. The classification of self-monitoring skill can be used to develop metacognitive scaffolding in an ITS.*

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Challenges of Inquiry Based Learning in Physical and Health Education

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Abstract. *Inquiry based learning (IBL) is a learning process in which students engage in their learning, formulate questions, investigate extensively and then build new knowledge. The key role of physical education is to encourage the development of cognitive and physical competencies to provide individuals with confidence and motivation to continue physical activities outside of school and maintain a healthy lifestyle. The IBL approach makes physical education relevant, meaningful, challenging and allows students to collaborate on assignments given in a safe and positive context. This factor affects student motivation positively and can encourage students to continue physical activities outside of school. We conduct systematic reviews to identify the difficulties and challenges faced by physical education and health teachers using IBL as a learning method. We conducted article search on Scopus by using keyword inquiry based learning and physical education. Based on our literature review, we identified six challenges that affect the learning outcomes using IBL.*

Keywords: Inquiry Based Learning; Physical and Health Education.

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Effectiveness of the Flipped Classroom Model on the Students' Mathematical Creative Thinking Skills

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Abstract. *The Flipped Classroom model is one type of Blended Learning model. In this model, the teacher will provide learning content to students through a website or social media before applying classroom learning. This study uses WhatsApp as a medium for sending content to students. WhatsApp is one of the social media applications on smartphones, tab, or computer that can be directly downloaded in the Play Store application, for Android devices, the App Store, for iOS devices, or Microsoft Store, for Windows devices. The purpose of this study is to determine the effect of applying the Flipped Classroom model to the Mathematical Creative Thinking Skill of Public Junior High School students in Sukoharjo District, Central Java Province. The research method used is a quasi-experiment with sampling using stratified cluster random sampling technique. There is three schools selected as the research samples, namely Mojolaban 1 Public Junior High School, Mojolaban 2 Public Junior High School, and Grogol 3 Public Junior High School. Data collection in this study used a mathematical creative thinking ability test method which is carried out after the treatment was given. The data analysis technique uses Mann-Whitney analysis. The result shows that the implementation of the Flipped Classroom model is more effective in increasing students' Mathematical Creative Thinking Skills than the direct learning model.*

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Industry In Supporting Successful Learning In Vocational Schools

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Abstract. *This paper will examine the vocational school in theory with the literature method. The purpose of this scientific work provides insight to the strengthening of the concept of vocational schools that have a role in the growth of the country's economy through the creation of quality professional energy. It is important to reflect on the direction of vocational education in Indonesia for the advancement of a state. The author wants to review in-depth how the industry is able to succeed vocations education? The result of the study in this paper is that the revitalization of vocational education as the job field should strongly support this vocational program in creating professional human resources. Vocational education revitalization can be done in several ways: 1) improved vocational school quality management, 2) optimizing cooperation with industry, 3) learning planning in vocational schools tailored to the needs of the industry.*

Keywords: Vocational Education; Industry; Media Learning.

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Improving English Learning Achievements of Seven Grade Students in Smp N 1 Batanghari Through the Implementation of "TS2" Techniques

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Abstract. *This study discusses the improvement of English learning achievement of class VII students in SMP N 1 Batanghari FY 2016/2017 through the application of the "TS2" technique. The main objective of this study, is to increase the learning achievement of English students of SMP N 1 Batanghari. This study explains the use of TS2 techniques in learning English can improve learning achievement in English VII grade students of SMP N 1 BATANGHARI 2016/2017. In this study, the subjects of this research were 27th grade students of SMP N 1 Batanghari, consisting of 13 male students and 14 female students. The results of this study are: 1) The use of the Ts2 learning model can improve student learning outcomes, with the results achieved are 91.4, 2) TS2 learning model is a learning model that can be used by teachers in the implementation of teaching and learning activities. Where this learning model is not only fun because there are elements of the game, but also can form students to be more courageous in the teaching and learning process, practice reading skills and quickly understand the material provided.*

Keywords: English Learning; Achievement; TS2 Techniques.

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Readiness of Teaching Factory Implementation Viewed From the Aspect of Teachers and Students in Computer and Network Engineering Competency Skills at Vocational High Schools in Yogyakarta

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Abstract. *This study aims to determine the readiness of the implementation of the teaching factory tingkat program computer and network engineering vocational school in Yogyakarta. This type of research used in this research is descriptive research with quantitative approach. Readiness is seen from several aspects: the aspect of readiness of teachers and students. Data collection techniques performed by questionnaire respondents as many as 18 teachers and 113 students. Based on the test results validity instrument with a significant level of 5%, a score $r_{table} = 0.361$ for the student questionnaire, $r_{table} = 0.456$ for the teacher questionnaire validity of the test results for the student instrument contained 4 invalid and 22 valid questions. As for the teachers instrument also contained 4 invalid and 22 valid questions.*

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The Construction of Identity 4.0 in the Classroom Interaction

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Abstract. *Most educators were born and socially constructed their identities in the age of industrial revolution of 2.0 or 3.0, which is far before the age of industrial revolution of 4.0; the age where most of the current students in the classroom were born. “Identity 4.0” as a “stage of identity”, refers to some theories of identity (Castells, 1997; Styrker, 2000), especially as they relate to the society construction. The purpose of this paper is to seek the answer on how the use of social media account as a ‘new identity’ among teachers and students in the classroom interacts each other. Since they originated from a different generation of the industrial revolution that constructs their identities. Using meta-analysis in qualitative research, this article reveals that the industrial revolution brings specific implications into identity construction and new model of interaction. This model of interaction emerges educators to have competencies not only in pedagogical skill but also having the artificial intelligence to enhance students’ academic achievement as well as on characters.*

Keywords: Identity Construction; Industrial Revolution; Stage of Identity; Model of Interaction; Artificial Intelligences.

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The Common Assessment Practices Employed by CLIL Teachers for Young Learners

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Abstract. *Although assessment is something that is a part of teachers' daily life, it is one of education's most complex issues when assessing CLIL classroom. Certain assessment instrument need to be created since assessing CLIL means assessing two areas (content and language). The current study aims to describes assessment practiced were used by CLIL teachers for elementary schools students. This study is a kind of qualitative case study. Questionnaire and interview were used to gain the data. The participants of the study were 42 CLIL teachers in three private elementary schools. The result reveals that the common mentioned assessment methods by CLIL teachers mostly traditional methods such as teacher observation, tests or test sections in English, dialogic interaction, and students' self-assessment.*

Keywords: Assessment; CLIL; Young Learners.

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System Usability Scale (SUS) Measurement on Synchronous Online Argumentation Learning System.

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Abstract. *Usability measurement on a system is an essential aspect of developing a system to meet user needs and produce a really high-quality system. There are many measurement tools to test the usability aspect in a system, but not many of them are effective and efficient to use. Undependable measurement tools will give an improper result and even waste time and resources. To solve this problem and measure usability perception in a more effective and efficient way, John Brooke invent the System Usability Scale (SUS) in 1986. The SUS is now applied in a more varied way, such as a website or technology-based applications to measure how easy or difficult they are to use in order to improve the system. In this research, the System Usability Scale was used to measure the usability aspect of a synchronous argumentation system in order to help improve the system. The participants were forty-two tenth grade students of Chi-Ying Senior High School in Taiwan tested with the system. The result shows the score is (78.45) which means it's in "excellent" rank from six of SUS grading key. Based on the result, the system's usability is high and qualified to use.*

Keywords: System Usability Scale, online system, usability, measurement, web-based system.

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