

UNIVERSITI KEBANGSAAN MALAYSIA The National University of Malaysia





# **BOOK OF ABSTRACT**

## BALI, 23-24 OCTOBER 2019

Golden Tulip Essential Denpasar JI. Gatot Subroto Barat No.101, Padangsambian Kaja, Kec. Denpasar Bar., Kota Denpasar, Bali



## The 1st Annual Conference on blended learning, educational technology and Innovation (ACBLETI) 2019

THEME : Implementation of Blended learning, educational technology and Innovation in Industrial Revolution 4.0

BALI, 23-24 Oktober 2019











## Preface

Dr. Abu Yazid Abu Bakar

Lieutenant Commander



Assalamualaikum wr.wb and greetings!

I would like to extend a warm welcome to all presenters and participants of the 1<sup>st</sup> Annual Conference on Blended Learning, Educational Technology and Innovation (ACBLETI) 2019 which is held in Denpasar, Bali, Indonesia from 23-24 November 2019. ACBLETI 2019 serves as an international platform to gather scholars, students, researchers and administrators from different countries, in order to explore and discuss theoretical and practical issues in the fields of science and technology.

The conference will be featuring a keynote speaker, Associate Professor Dr. Melor Md. Yunos from Faculty Education, Universiti Kebangsaan Malaysia, along with several invited speakers from both Indonesia and Malaysia. Also, more than one hundred papers will be presented during the parallel sessions. I believe all participants of ACBLETI 2019 will be benefited from all the planned activities of this conference.

On behalf of the organizing committee, I wish to encompass our heartfelt gratitude to all presenters and participants of ACBLETI 2019 for their kind contributions and supports. We also hope that the conference will establish a networking platform for experts, particularly in the fields of science and technology, to exchange ideas and collaboratively working together to heighten the standards of both fields leading to the era of Fourth Industrial Revolution (4IR). Have a good conference to all of you!!

Waalaikumsalam wr.wb



## **Keynote Speaker**



#### Assoc. Prof. Dr. Melor Md Yunus

Deputy Dean (Research & Innovation) Faculty of Education Universiti Kebangsaan Malaysia

Dr Melor Md Yunus is an Associate Professor and Deputy Dean of Research and Innovation at the Faculty of Education, Universiti Kebangsaan Malaysia. She is best known for establishing the integration of ICT in teaching and

learning English as a Second Language research. She contributed to developing the PERMATApintar National Gifted Centre in Malaysia in 2009 and was appointed as the first Deputy Director of the centre. She is the first recipient of the National Higher Education e-Learning award (2014) for her contributions in Creativity (Blended Learning, Flipped Learning, and Problem-Based Learning). She is also in the Top 3 Cited Malaysian Researcher List in 2014 MRUN Report and she won UKM Best Teaching Award (Bitara Pendidik) in 2016. She was conferred upon the award of Distinguished Woman in Social Science 2017 for her contribution and achievement in the field of Teaching and Learning Innovation by Venus International Foundation. She is active in scholarly journal writing and publishing and has currently published more than 100 papers in SCOPUS. Her publications have been cited almost 600 times and she has an author SCOPUS h-index of 11. The recipient of 183 innovation awards, she is highly regarded among her peers in her field.





#### **Dr. Harwati Hashim** Universiti Kebangsaan Malaysia

Harwati Hashim is a senior lecturer at the Centre for Teaching and Learning Innovations, Faculty of Education, National University of Malaysia (UKM) and currently the Head of Undergraduate Programme for Teaching English as

a Second Language (TESL). She holds a Bachelor in Education (TESL) from Malaya University (UM) and an M.Ed in TESL from National University of Malaysia (UKM). She then earned her PhD in Education (TESL) from UKM. She is an educational technology enthusiast and an e-learning practitioner. Specialising in Technology-enhanced Language Learning (TELL), she has published articles in journals and proceedings at the national and international level. She is also an active presenter at the local and international conferences as well as at innovation competitions. To date, she has won more than 30 medals including a diamond medal from various local and international innovation competitions mainly focusing on e-learning, mobile learning, augmented reality and the use of social media for Her areas of concentration are mobile learning, Mobile-assisted Language learning. Learning (MALL), technology acceptance as well as language pedagogy and the use of technology in Teaching English as a Second Language (TESL). She is also an Apple Teacher and a committee of Mobile Learning Association Malaysia (MLAM). Currently, she teaches current approaches to TESL, academic writing, language learning strategies and Social Media & Learning (SMiLe).





Dr. Izwah Binti Ismail Ungku Omar Polytechnic, Malaysia

Izwah Ismail,PhD is a senior lecturer at Department of Electrical Engineering, Politeknik Ungku Omar and currently leads the Centre of Technology Robotic, Electrical & Electronic (CTREE). She is a technology specialist and has

published articles in journals and proceedings at the national and international level as well as contributes as the reviewer for scopus index journal. She also actively participates and has won gold medals and special awards in local and international innovation competitions. Her experience spans various technology solutions focusing on future proofing through digital transformation and the introduction of IoT applications. At present, her research interest in fiber optic and mobile engineering. Besides that, she actively involves in international projects regarding TVET ecosystem and skills partnerships.





Dr. Kadek Suranata, M.Pd., Kons Universitas Pendidikan Ganesha, Indonesia

Kadek Suranata, Senior Lecturer in Guidance and Counseling, Universitas Pendidikan Ganesha, Bali, Indonesia. He received his B.E. In Guidance and Counselling from Universitas Pendidikan Ganesha (Bali, Indonesia), M.Ed

degree, and Pendidikan Profesi Konselor (Counselor Profession Education degree- only in Indonesia) in Guidance and Counseling from Universitas Negeri Padang (West Sumatera, Indonesia), and Ph.D degree in Universiti Negeri Malang (East Java, Indonesia) In in 2007, 2009, and 2017, respectively. He has been a Senior Lecturer in UNP, since 2014. His research interests include the field of assessment, internet addiction intervention and mental health counseling, ITC in counseling, sexual abuse, violence addition counseling, crisis intervention and trauma counseling. He is active in scholarly journal writing and publishing and has currently published more than 150 papers in various Citation-Indexed journals particularly SCOPUS. He I is licensed counselor at the Indonesian Counselors Association (IKI) and a private counselor.





Aspalilla Main, PhD Politeknik Merlimau Melaka, Malaysia

Aspalilla Main, PhD is a senior lecturer in Electrical Engineering Department, Politeknik Merlimau Melaka. She also serves as research officer at Unit Penyelidikan, Inovasi dan Pengkomersialan as well as being a guest researcher at

Institute of Reliable Embedded System and Communication Electronic, Germany, Aspalilla received Bachelor's Degree in Electrical Engineering (IT) with hons from Universiti Teknologi Malaysia. She also holds double master degrees in TVET Education and Communication from Universiti Tun Hussein Onn, Malaysia & Information System Engineering from Universiti Teknologi Mara, Malaysia and earned her PhD in Computer Networking focusing on IPv6 Migration . Her research interests are various mainly focusing in Computer Networking, that particularly on IPv6 migration and Internet of Things besides the use of technology for teaching and learning. She also actively participated in various innovation exhibition and academic conference for both fields at the national and international conference. Recently, she has won the gold medal and first place in national innovation exhibition with her innovation that focused on edutainment as teaching aids. She has published articles in journals and proceedings at the national and international level. Her recent research activities include developing the edutainment package and development of smart building for future IoT testing platform has been awarded research grant from Ministry of Education (Malaysia). Besides, she actively involve in training courses as an instructor for Malaysia's polytechnic especially in the field of research activity and innovation development. She is also a Certified Microsoft Innovative Educator and Microsoft Educator Community Contributor as well as an e-learning practitioner.



## **Speakers of Coaching Clinic**



Robbi Rahim, S.Kom., M.Kom Sekolah Tinggi Ilmu Manajemen Sukma, Indonesia

Itsar Bolo Rangka, M.Pd., Kons Universitas Universitas Indraprasta PGRI - Jakarta





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- Yola Eka Putri (Scopus ID: 57205158723) Indonesian Institute for Counseling Education and Therapy (IICET), Indonesia
- Beru Amalianita, Indonesian Institute for Counseling Education and Therapy (IICET), Indonesia



## **Focus and Scope**

The range of the topics covered by ACBLETI 2019 includes:

- Mathematical physics
- Technology Enhanced Learning
- Virtual Reality for Learning
- Content and Development for Online and Blended Learning
- Mobile and Digital Technology for Education
- Multimedia Application in Education
- Computer Science
- Instrumentation and measurement
- Creativity and Innovation
- Other Relevant Field

## **Important Date**

Description	Dates
Abstract Submission Deadline	5 November 2019
Acceptance Notification	8 November 2019
Abstract Revision Deadline	10 November 2019
Full Paper Deadline	Post Conference 30 November 2019
Payment Deadline for Presenter	12 November 2019
Registration and Payment Deadline for	15 November 2019
Participant Only	
Conference Day	23 - 24 November 2019
Manuscript Coaching Clinic (only for	24 November 2019
Journal Publication) *T&C	



## **Even Schedule**

Time	Activities	Executive	Responsible person
07:00 –08:00 am	Registration	Organizer	Organizer
08:00 – 08:15 am	Opening Ceremony	Organizer	Organizer
08:15 – 09:00 am	National Anthem of	Organizer	Organizer
	Indonesia "Indonesia		
	Pray	Organizer	Organizer
	Report from the	Committee Chairman Lt Kdr Dr. Abu Yazid Abu Bakar, PhD., M.Ed.	Organizer
	Opening Speech	<b>Prof. Dr. Ketut Dharsana,</b> <b>M.S.,Kons</b> Head of Magister Program GC Universitas Pendidikan Ganesha	Organizer
09:00 – 09:30 am	Tea break	Organizer	Organizer
09:30 – 10:45 am	Keynote Speaker 1	Assoc.Prof.Dr. Melor Md Yunus	Organizer
10:45 am – 12:15 pm	Plenary session 1	Dr. Harwati Hashim Dr. Izwah Binti Ismail	Organizer
12:15 – 01:15 pm	Lunch	Organizer	Organizer
01.15 - 03.00 pm	Plenary session 2	Assoc. Prof. lf, Ph.D Aspalilla Main, PhD Dr. Kadek Suranata, M.Pd	Organizer
03:00 – 03:30 pm	Tea Break		Organizer
03:30 – 04:30 pm	Parallel session 1	Organizer	Organizer
04:30 – 05:30 pm	Parallel session 2	Organizer	Organizer



## **Even Schedule**

## Day 2, Sunday (24 November 2019) "City Tour" or Manuscript Coaching Clinic (Optional). T&C

Time	e Activities		Responsible person		
Platinum A City Tours (Additional fee IDR. 450.000)					
07:30 – 07:45 pm	Opening	Organizer	Organizer		
07:45 – 16:00 pm	City Tour	Organizer	Organizer		
17:45 – 18:00 pm	Closing	Organizer	Organizer		

Platinum B Manuscript Coaching Clinic for Journal Manuscript(s) (Additional fee IDR. 500.000)

07:30 – 08:00 pm	Opening	Organizer	Organizer
08:00 – 16:00 pm	Coaching Clinic	Robbi Rahim H-Index 15 Itsar Bolo Rangka, H-Index 2	Organizer
17:45 – 18:00 pm	Closing	Organizer	Organizer



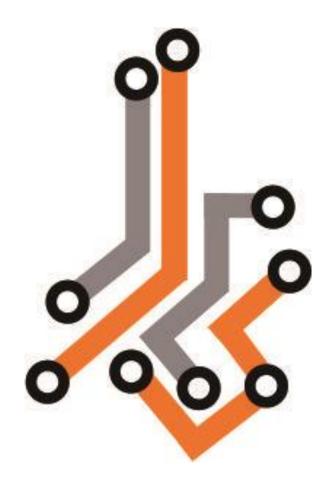
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Parallel Session I	Room	Paper ID				
		GS.AB-2	GS.AB-12	GS.AB-10	GS.AB-9	GS.AB-16
Saturday,	ROOM 1	GS.AB-5	GS.AB-4	GS.AB-8	GS.AB-6	GS.AB-17
23 October 2019		GS.AB-20	GS.AB-19	GS.AB-18	GS.AB-24	GS.AB-21
03.00 – 04.30 pm	ROOM 2	GS.AB-27	GS.AB-26	GS.AB-25	GS.AB-22	GS.AB-29
		GS.AB-32	GS.AB-31	GS.AB-30	GS.AB-33	GS.AB-34
		GS.AB-13	GS.AB-15			

Parallel Session II	Room	Paper ID				
		GS.AB-46	GS.AB-45	GS.AB-48	GS.AB-47	GS.AB-51
Saturday,	ROOM 1	GS.AB-50	GS.AB-36	GS.AB-49	GS.AB-63	GS.AB-52
23 October 2019		GS.AB-44	GS.AB-40	GS.AB-37	GS.AB-38	GS.AB-53
04.30 – 04.30 pm		GS.AB-43	GS.AB-41	GS.AB-39	GS.AB-55	GS.AB-54
	ROOM 2	GS.AB-58	GS.AB-57	GS.AB-61	GS.AB-62	GS.AB-64
		GS.AB-60	GS.AB-59	GS.AB-67	GS.AB-68	GS.AB-35

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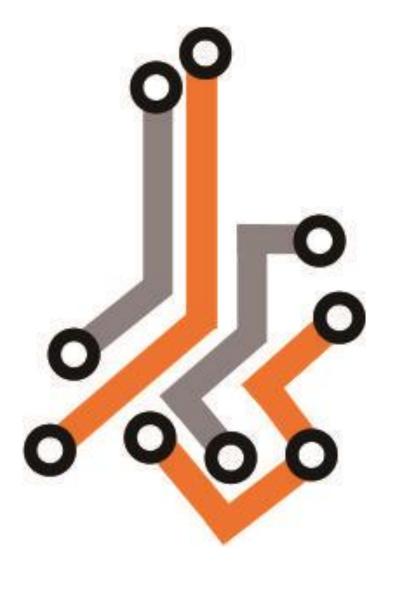
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#### [GS.AB-2] Students' Perspectives of Beliefs and Challenges on Canvas as Blended Learning in Mathematics for Industry 4.0

#### C A Chusna, S Munafiah and N A Istiqomah

Semarang State University

#### Abstract

The importance of mathematics in industry continuesly grows and developes. That is why it is important to understand how the transfer of knowledge that comes from various digital learnings. Canvas, one of the blanded learning media, has been already popular in America but not in Indonesia. In this study we feel interested to use Canvas as a blanded learning media since it provides an online learning environment that supports students in Mathematics classes. This research aims to illustrate the perspective of students' conviction and challenge in using canvas as a blanded learning media. This research uses survey method. There are 36 high school students participants of this study. A survey questionnaire is used in this study to obtain the information about students' perspective after using canvas in Mathematics learning. The results of this study indicates that students have a positive response and challenging to take part in learning with canvas, create a new atmosphere in the Mathematics class and provide students some opportunities to express their opinions.

**Keyword** : Students' Perspective, Canvas, Mathematics Classroom. **Topic** : Content and Development for Online and Blended Learning

#### [GS.AB-4] M-Absence : Analysis and Design using Unified Modelling Language (UML)

Dewi Anjani, Hilda Hilaliyah, Desi Novianti

Universitas Indraprasta PGRI

#### Abstract

The development of cellular technology is very fast; this has led to technological advances in all fields where one of them is education. E-absent is an Android-based technology that serves to help student guardians report or notify student absence to the teacher and enter the necessary documents into the system. Then the teacher will send the subject matter and lesson assignments to students when students are absent, so students do not miss the lesson. This paper discusses system analysis and design using the Unified Modelling Language (UML), which makes it easier to describe the system as a whole. And the results of this study are an e-absence model that fits the needs of the school

**Keyword** : Mobile Application; UML; School; M-Absence **Topic** : Mobile and Digital Technology for Education



#### [GS.AB-5] How Phubbing Behavior In Indonesian Students?

Taufik Taufik, Alizamar Alizamar, Afdal Afdal, Miftahul Fikri, Ifdil Ifdil

Universitas Negeri Padang

#### Abstract

This research is motivated by the increasing number of phubbing behaviors in students in Indonesia, which does not affect their learning activities but also disrupt their psychological and social life. The objectives of this research are the analyzed of the phubbing level among student. The research approach is quantitative descriptive, with a sample of 1124 students used purposive sampling technique. Data were collected used AA phubbing Inventory, with items reliability 0.96 and respondents reliability 0.92. The data analyzed used descriptive and deferential analysis. The results showed that in general the students' phubbing behavior was in the high category, no deference's phubbing base of gender, and ethnic. Collaboration and comprehensive efforts are needed to reduce of the problem.

**Keyword** : Phubbing Behaviour; Student; Guidance and Counseling **Topic** : Mobile and Digital Technology for Education

#### [GS.AB-6]

#### Blended Learning based on Problem Based Learning to Improve Critical Thinking Ability of Prospective Counselors

Edris Zamroni\*, Muslihati\*\*, Blasius Boli Lasan\*\*, Nur Hidayah\*\*

#### \*Program Doktor Universitas Negeri Malang, Dosen Universitas Muria Kudus \*\*Universitas Negeri Malang

#### Abstract

This study determines the effectiveness of the application of blended learning with problembased learning methods to improve the critical thinking skills of prospective counselors. The subjects chosen were 40 guidance and counseling students taking counselor personal development courses. I conducted the study through true experiment design with 1 experimental class and 1 control class with 20 students each. T-test results of students' critical thinking skills got t count 2.41> t table 2.03. This shows that the students' critical thinking skills taught with PBL-based blended learning are better than those of critical thinking students taught with conventional PBL. So we can conclude it that Blended Learning based on Problem Based Learning is effective for Improving Critical Thinking Skills of Prospective Counselors.

**Keyword** : Blended Learning, Problem Based Learning, Critical Thinking Skills **Topic** : Content and Development for Online and Blended Learning



#### [GS.AB-8] Selection of Feature Driven Development (FDD) Models in Agile Methods for the Development of a Project

Sasmitoh Rahmad Riady, Billy Tigo Ramadhan, Ki Agus Ahmad Zulfikar and Rusdianto Roestam

President University

#### Abstract

This paper deals with software development in building a project using the Feature Driven Development (FDD) model contained in the agile method. FDD is a nimble, process-oriented software development model and clients that develop software in accordance with features valued by clients. Like other agile models, this model also has adaptive and incremental properties to implement the functionality needed in a short iteration. FDD mainly focuses on the design and construction aspects of software development with more emphasis on quality and high-profile. To facilitate the discussion of FDD, a case study will be provided taken from a book by Stephen R. Palmer and John M. Felsing about the project at Gary's Garage, a car dealership and servicing and repair shop.

Keyword : Software Development, Agile Method, Feature Driven Development

**Topic** : Other Relevant Field

#### [GS.AB-9]

The Development of Android-Based Combinatorics Application for High School Students

Ervin Azhar, Atiqah Meutia Hilda, Rizki Dwi Siswanto

Universitas Muhammadiyah Prof. DR. HAMKA

#### Abstract

This development research aims to produce Android-based combinatorics application as a learning medium for high school students, as well as knowing the quality of combinatorics applications that have been produced is suitable for use in learning mathematics. This research is a research and development (R&D) adapted from the 4D development model. There are 4 stages: Define, Design, Develop, and Disseminate. Data analysis techniques are used by the feasibility test and the quality test of the media. The results showed the feasibility of an Android-based combinatorics application based on the assessment of media experts was 91.93% with very good criteria and the assessment of material experts was 84.97% with good criteria. The media was tested publicly from 198 students of SMAN 40 Jakarta. The public trial obtained application quality in the aspect of display quality of 84.70% with good criteria, the writing aspect of 87.50% with very good criteria, software engineering aspects of 86.70% with very good criteria, the dubbing sound aspect was 81.20% with good criteria. Based on the results of data acquisition, it shows that Android-based combinatorics applications are appropriate to be used as a source of mathematics learning at the high school level.

**Keyword** : Combinatorics, Android, Android-Based Combinatorics Applications, M-Learning **Topic** : SMobile and Digital Technology for Education



#### [GS.AB-10] Students' Responses to E-learning System: Does ICT Skill Level Affect?

Iga Setia Utami, Setia Budi

Universitas Negeri Padang

#### Abstract

The diversity of university students is a concern to apply instructional media. This study presents whether the ICT skill level impact the use of e-learning system based on students' responses. In this case, an e-learning system is a new form of applying technological features in teaching and learning activities, although it has been initiated and used in other places. By doing this research allows lecturers, to get an idea of their students' responses using e-learning, so they can consider applying this learning system by looking at the level of student ability. This study is descriptive research. The research instrument consisted of ICT skill questionnaire and student perception questionnaire on e-learning. Data were analyzed using the descriptive statistical technique. This study found that the higher the score of students' ICT skills, the higher the perception scores of students towards e-learning. It can be concluded that there is a significant relationship between the levels of ICT skills with student responses to e-learning systems.

Keyword : E-Learning, ICT Skills, Students' Responses Topic : Content and Development for Online and Blended Learning

#### [GS.AB-12]

#### An Educational Vocabulary Game (EVG) to Enhance English Vocabulary among Students with Hearing Impairment in an Inclusive School

Iva Evry Robiyansah, Mudjito, Yuliyati, Atiqoh, & Ketut Susiani

#### Universitas Negeri Surabaya, Universitas PGRI Adi Buana Surabaya, Universities Pendidikan Ganesha

#### Abstract

This study aimed to describe the use of an Educational Vocabulary Game (EVG) application to improve the English vocabulary and aimed to test the practicality and effectiveness of an EVG application in improving functional English vocabulary among students with hearing impairment in an inclusive school. Functional English vocabulary is a vocabulary that is close to a child's daily life. The vocabularies which were developed in this application related to profession, fruit, animal, transportation, household appliance, school equipment and colour. This study was development research which involved several steps including concepts, design, material collection, manufacturing and field testing. Data were collected through observations and tests. Participants were twenty students with hearing impairment and five teachers in an inclusive school in Indonesia. The results of the study showed that the average score of pre-test was 6.5, while the average score of post-test was 8.9. Moreover, the highest score of the post-test was 9.5. Furthermore, the practicality test reported a score of 98.66%. Based on these results, the use of the EVG application was useful and practical to improve the learning outcomes on English vocabulary among students with hearing impairment in an inclusive school.

Keyword : Educational Vocabulary Game, English Vocabulary, Hearing Impairment, Inclusive School

**Topic** : Multimedia Application in Education



#### [GS.AB-13]

#### The Effect Post Training Monitoring and Mentoring to Teachers Performance in Implementation Inclusive Education in Elementary School

Irdamurni, Nurhastuti, Zulmiyetri

Universitas Negeri Padang

#### Abstract

This research draws on teachers' failure in implementing the knowledge of inclusive education following the training. This research aims to investigate whether monitoring and mentoring of post-training effectively improve teachers' performance in implementing inclusive education. The method of the research was a survey method using the ex post facto design. The samples selected for the research were the teachers who participated in inclusive education training in 2016. Findings of the research showed that; (1)The competence of teachers in inclusive education has improved following post-training. (2) The teachers' performance in implementing inclusive education has improved after the assistance was provided (3) Training and mentoring have significantly improved teachers' performance in implementing inclusive education.

**Keyword** : Monitoring ; Mentoring ; Teachers Performance; Inclusive Education **Topic** : Creativity and Innovation

#### [GS.AB-15]

Developing Students' Science Process Skills Using Discovery Learning Method In Understanding Of The Concept Of Basic Electric Circuits

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Department of Electrical Engineering Education, Universitas Negeri Manado, Minahasa 95618, North Sulawesi, Indonesia

#### Abstract

Science process skill (SPS) is one of the skills needed by humans to face the challenges of the industrial revolution 4.0 in the 21st century. Students who have an SPS are able to understand scientific concepts including basic and complex basic electric circuits (BEC). In learning activities, appropriate methods are needed so that SPS students can develop optimally according to their potential and will contribute to student learning outcomes in BEC subject matter. The research objective is to develop students' SPS by using TDLM (teaching discovery learning methods) and their impact on student learning outcomes of BEC (OLBEC). The research method is experiment. Experiment design is to compare discovery teaching and conventional teaching methods (CTM) on BEC subject matter. Participants in this study are 72 students, 36 students as experimental groups using TDLM models and and 36 students are control. Research data were analyzed using Manova statistics. The research findings obtained that SPS and OLBEC students who followed the TDLM approach were higher than students who followed CTM. Research suggestions in learning the BEC concept need to be applied discovery learning method.

Keyword : Discovery learning, science process skills, basic electric circuits.

Topic : Other Relevant Field



#### [GS.AB-16]

#### Implementation of Blended Learning To learn through the Discovery Learning Model in Calculus I Subject

Feli Cianda Adrin Burhendi, Wahyu Dian L, A. Kusdiwelirawan, Dony Darma Sagita

Universitas Muhammadiyah Prof. DR. HAMKA

#### Abstract

The focus of this research is the implementation of blended learning in teaching at the university. Blended learning is practical solutions to make learning more flexible. The effectiveness of learning blended learning is still been examined until now by using many technical methods. In line with it, we are trying to do the research learning blended learning through the learning discovery model in calculus I subject. The Discovery Learning model prioritizes independent learning in its learning process so that it can improve learning outcomes for the calulus I course. The research used a quantitative research method with One Group Pretest-Posttest Research Design. The results of this study indicate that there is a positive influence of blended learning to use discovery learning models in the first calculus I subject which is shown by statistical calculations tcount = 1.818 with ttable = 1.717. In the hypothesis test used t-test (with  $\alpha$  = 0.05), thus H0 is rejected however that there is a significant influence blended learning through learning discovery model in calculus I subject.

Keyword : Blended Learning, Discovery Learning, Calculus

**Topic** : Content and Development for Online and Blended Learning

#### [GS.AB-17]

#### The effectiveness of Etmodo based Blended Learning in Indonesian history subject

#### Andi, Hari Naredi, Jumardi

#### University Of Muhammadiyah Prof. DR. HAMKA

#### Abstract

The effectiveness of Blended Learning model using Edmodo in History subject in Indonesian High School The aim of the research is to know the effectiveness of Blended Learning model using Edmodo in History in the High School. The methode used Quantitative which is One Group Pretest – posttest design type. The instrument that used in this research is the result of student learning in World's Revolution using Edmodo Application. The result of this research showed that Blended Learning using Edmodo is effective to improve ability students to understand the world's revolution in history subject. It can be seen from the table counting that 8.7 > 1.67, because of t> table >. The blended learning base of Edmodo is effective increase understanding skills in World Revolution subject.

Keyword : Blended Learning, History, Edmodo, Indonesian History

**Topic** : Content and Development for Online and Blended Learning



#### [GS.AB-18] Needs Assessment of Parents of Children With Cerebral Palsy Observed from Family Counseling

#### Nurhastuti, Kasiyati, Zulmiyetri, Irdamurni

#### Universitas Negeri Padang

#### Abstract

Caring for a child with cerebral palsy can impact on the quality of life of parent. Raising a child with cerebral palsy is stressful for the parent because it requires an intensive physical engagement such as family counseling. Raising a child who has cerebral palsy creates fresh challenges for the whole family. Family counseling is a disability waiver service that includes counseling for the person and/or family members who serve as unpaid caregivers as identified in the individual plan of care. The aims of this study was to determine the needs of parents who have cerebral palsy children. The object of this research is 13 parents who have cerebral palsy children in Padang. A qualitative study was conducted utilizing a grounded theory framework, with data collection through literature study, observation, and also using a questionnaire. The analysis tool used is explanatory research. The results of this study indicate, the family counseling approach provides an assessment method for parents who have cerebral palsy as follows: (1) Parents' acceptance of their children with cerebral palsy; (2) Factors influencing the parents' acceptance of their children with cerebral palsy; and (3) Problems and challenges faced by the parents in raising children with cerebral palsy.

Keyword : Needs Assessment, Parents, Cerebral Palsy, family counseling

**Topic** : Other Relevant Field

#### [GS.AB-19]

#### Simulation Game About Career Readiness In Junior High School Students

Agus Ria Kumara\*, Imam Hambali\*\*, Nur Hidayah\*\*, Ahmad Taufiq\*\*

#### \*Program Doktor Universitas Negeri Malang, Universitas Ahmad Dahlan \*\*Universitas Negeri Malang

#### Abstract

The purpose of this research is to produce a product that is the game simulation roulette question and focus on career readiness. The research design uses development research (R n D) from Borg and Gall to the sixth stage. A subject that is used is junior high school students in Jogjakarta. The data collector used is the expert assessment sheet. Analysis of the data used with qualitative and quantitative. The results of research in the form of simulation game products with the results of the assessment of material expert tests get a value of 82 (very good), test service experts get a value of 91 (very good), media experts get a value of 93 (very good) and test users get a value of 90 (very good). From these results it can be concluded that the game simulation roulette question and focus on career readiness is appropriate to be used in the process of guidance and counseling services, especially in individual student planning services.

Keyword : Simulation Game, Career Readiness, Individual Student Planning

**Topic** : Creativity and Innovation



#### [GS.AB-20] Phubbing Behavior: How it's Related to Happiness

Alizamar\*, Miftahul Fikri, Afdal, Yuda Syahputra, Indah Sukmawati, Asmidir Ilyas

Universitas Negeri Padang

#### Abstract

Various problems today are the millennial society to experience addicted to the existence of smart phones, the Internet, social media, and games. We also know this student behavior as phubbing behavior. This study analyzes the phubbing behavior in Indonesia seen in relation to the level of happiness (Unhappy, Happy). Respondents in this study were 1093 students, who were taken using a multistage random sampling technique. The instrument used was a Phubbing Behavior Scale (APBS). This research method uses comparative quantitative descriptive. Data analysis used analysis of variance. The results found 45.2%, Indonesian students experienced phubbing behavior in the high category (495 respondents). Judging from the level of happiness when filling out the questionnaire, there is no significant difference in the mean of students who have a tendency towards phubbing behavior. This shows that phubbing behavior leads to negative psychology. It does more harm. This result needs special attention from different related parties to overcome the problems faced by students. Problems that occur cannot be addressed personally; we need collaboration between various parties to overcome phubbing behavior, which can be discussed further.

**Keyword** : Phubbing behavior, happiness vs unhappiness

**Topic** : Content and Development for Online and Blended Learning

#### [GS.AB-21]

#### The Urgency of the Role of Guidance and Counseling Services in Helping Career Planning for Deaf Students

Mega Iswari, Afdal, Miftahul Fikri

Universitas Negeri Padang

#### Abstract

Deaf children are one of the exceptional children who experience physical disabilities, especially in hearing which affects in a lack of confidence in career planning. This problem needs the role of school counselors in planning students' careers by providing self-understanding and the environment through guidance and counseling services. This study aims to describe the differences in career planning for deaf students with and without counselors in schools. The samples of this study were 96 students from13 high schools. The results showed that there is a significant difference between the career planning of deaf students in high schools with counselors and those without counselors at school. Profiles of career planning for deaf students based on the presence or absence of school counselors were discussed further.

Keyword : Counseling, Deaf, Career

**Topic** : Other Relevant Field



#### [GS.AB-22]

#### The Effect of Journal Utilization of Student Learning Outcomes on The of Genetic and Neurological Physiology Anatomy Student in The First Semester in Majoring Special Education at The Faculty of Education Universitas Negeri Padang

Setia Budi, Nurhastuti

#### Universitas Negeri Padang

#### Abstract

Journals are a source of learning that is a compulsory reference for students at higher education. This study aims to determine the effect of the use of journals on student learning outcomes in anatomy and neurology physiology courses in the first semester students majoring in Special Education at the Faculty of Education, Universitas Negeri Padang. This type of research is pre-experimental with one group pretest-posttest design. The research sample was 104 in the first-semester student of the Department of Special Education, Faculty of Education, Universitas Negeri Padang, Academic Year 2019/2020, as many as 104 people who took the Anatomy Physiology Genetics and Neurology course. Paired T-Test results obtained an average value of pretest, which is 68.83 while in the posttest, an increase in the average learning outcomes 92.84. Furthermore, the results obtained p-value = 0,000 (p-value = <0.05); this shows that the use of journals in learning has a significant influence on student learning outcomes. Through optimizing the use of journals in learning activities, it is very vital to improve student learning outcomes.

Keyword : Journal, Learning Outcomes, Special Education

**Topic** : Other Relevant Field

#### [GS.AB-24]

#### Improving Reading Comprehension of Students with Learning Disabilities through the Cloze Technique

Zulmiyetri, Nurhastuti, Irdamurni, Mega Iswari

#### Universitas Negeri Padang

#### Abstract

The aim of this research is to find out of the effectiveness of of the cloze technique in improving the reading comprehension for children with learning disabilities. The research's subject are four students of the fourth grade. Data was collected by test. The instrument consist of 15 questions. Data collected was analyzed by Wilcoxon Sign Rank Test. The reading comprehension test score of the stundent have improved. The pre test mean score is 56.80, but after treatment the post test mean score is 79. Data analysis with SPSS 22 data program show significantly score (Z score) is 0.043, its under or significantly ( $\alpha$ ) fixed is 0.05 (5%). Based on these results, it could be concluded that the cloze technique is effective to improve the reading comprehension for children with learning disabilities

Keyword : Reading Comprehension, Learning Disabilities, Special Education

Topic : Creativity and Innovation



#### [GS.AB-25]

#### Students Digital Literacy to Solve the Problems of Learning

Dony Darma Sagita, Feli Cianda Adrin Burhendi, Rizki Dwi Siswanto, Asni

Universitas Muhammadiyah Prof. DR. HAMKA Jakarta

#### Abstract

Learning problems are certain conditions experienced by students and hamper the process of the individual to get a new change in behaviour as a whole. This study aims to see the extent of students' digital literacy skills in managing learning problems. The method used is descriptive qualitative with instruments in the form of questionnaires and interviews. The research instrument was distributed to a sample of 200 students in guidance at Faculty of Education, UHAMKA. The results showed that the students have the ability of digital literacy at the conventional stage of literacy or it can be said that the student is at the stage of interest in digital literacy with score 70,1%. In a sense, the student has not been able to sort and criticize the information contained in the information system available for use in solving the learning problems with score 43,3%. Therefore, there is a need for guidance for students to improve their digital literacy skills in solving the problem of learning.

**Keyword** : Digital Literation, Information and Communication Technology, Learning Problems **Topic** : Mobile and Digital Technology for Education

#### [GS.AB-26]

#### Development of Digital Character Education Comics As an Intervention Media of Group Guidance in Efforts to Improve Cognitive Empathy of Elementary Students

Dr.Wirda Hanim, M.Psi. ,Djunaedi, M.Pd.

Universitas Negeri Jakarta

#### Abstract

The results of previous study of 632 elementary students who were respondents using the EmQue-CA scale concluded that aspects of cognitive empathy are the lowest aspects. Students with these criteria need to get group guidance services using media. Existing group guidance media have not been specifically developed to intervene in students' cognitive empathy. The final goal of this research is to produce a group of media guidance in the form of digital comics that are suitable for use as a medium of intervention in Group Guidance. The research method uses Hannafin and Peck's Model Research and Development method. This method step starts from the needs study, Design, Expert Test, Revision and Field Testing. This research reached the expert test stage. Overall media expert test results give a percentage of 80% in the first comic design. After the results have been improved, 95% of the media aspects and 97% of material aspects. This showed according to the digital comic expert produced as a viable medium for Group Guidance intervention to increase students' cognitive empathy.

Keyword : Group Guidance, Cognitive Empathy, Intervention, Media

**Topic** : Mobile and Digital Technology for Education



#### [GS.AB-27]

#### Gender Differences of Phubbing Behavior : A Rasch model approach

Miftahul Fikri, Afdal, Alizamar, Zikra, Mudjiran

Universitas Negeri Padang

#### Abstract

Almost every society millennia always used android cellphone, the Internet and social media for their lives. The phenomenon that occurs today millennial society cannot be separated from smart phones or surfing in cyberspace. Regarding this, Psychological interventions are needed that can overcome this, so it is necessary to describe the condition of phubbing behavior. This study aims to describe the differences in phubbing behavior between men and women. The sample of this study was 1124 students across Indonesia (455 boys and 669 girls) spread throughout schools in Indonesia. The instrument used in this study was A Phubbing Behavior Scale (APBS). The analysis used was an independent sample t-test combined with the Rasch analysis model. The results of data analysis showed that there were no significant differences in the behavior of male and female phubbing seen from an average of 53.69 with 53.73. This shows that phubbing behavior can occur to anyone, both men and women. We discuss further this finding.

Keyword : Phubbing Behavior, Gender, A Rasch model approach

**Topic** : Mobile and Digital Technology for Education

#### [GS.AB-29]

Testing the Validity and Evaluating the Implementation of a Village Financial Administration Teaching Model through Microsoft Excel Program to Help Village Apparatuses in Administrating and Operating the Village Financial System

Ni Luh Gede Erni Sulindawati, Naswan Suharsono, I Wayan Lasmawan,I Nyoman Natajaya, I Gusti Arya Sunu

#### Universitas Pendidikan Ganesha

#### Abstract

This study aimed at testing the validity and evaluating the implementation of a village financial administration teaching model through a Microsoft program excel that has been developed. The study used Sugiono's development method in its trial and product revision stages. The data were collected through observation, interview , documentation and evaluation of learning achievement of the village apparatus . The data used in this study were analyzed using a quantitative analysis. The quantitative analysis was used to evaluate the result of the trial of the model and to evaluate the learning achievement of the village apparatus. Based on the result of the validity testing by experts it was found that the mean of the content validity is 3.24, falling into a reliable category, R = 93.8% and the mean of the construct validity is 3.22 with R = 92.8%, falling into a reliable category, which means that the teaching model is valid and reliable. The mean of the learning achievements of the village apparatuses = 87.63%, falling into a very good category, which means that the village apparatuses understand the teaching model and this model helped them to do the administration and operate the village financial system.

**Keyword** : Teaching Model, Excel Microsoft Program, Village Financial Administration **Topic** : Technology Enhanced Learning



#### [GS.AB-30] Benefits of Gamification towards Different Learning Styles in Language Learning

Fetylyana Nor Pazilah, Harwati Hashim & Melor Md Yunus

Universiti Kebangsaan Malaysia

#### Abstract

In the modern age, chalk and talk may not be as relevant as it was a decade ago. With the technology advancing exponentially, it has provided the earth citizens with its practicality and flexibility particularly in language learning. However, there are still a majority group of people who have not fully utilize learning through technology. Gamification is one of the effective ways to learn a language as it also caters to all different types of learners. Thus, it is essential to look into how this gamification approach could be integrated in language learning. This conceptual paper aims to review the benefits of gamification towards different learning styles in language learning. This study implies that implementing gamification in learning can help students to achieve their targeted goals in language learning and making teaching easier for the teachers. Future studies can investigate on the challenges of gamification learning.

Keyword : Gamification; Learning Styles; Language Learning; ESL

**Topic** : Technology Enhanced Learning

#### [GS.AB-31] Flipped Learning in Malaysia

Siti Fatimah Abd Rahman, Melor Md Yunus & Harwati Hashim

Universiti Kebangsaan Malaysia

#### Abstract

The 21st century of education demands for student-centered learning rather than the conventional teacher-centered learning. There are numbers of new models and approaches to be adapted in order to meet the demand. One of the popular models in Malaysia is flipped learning. Flipped learning focuses on meaningful learning and it also promotes student-centered learning style. This paper explores flipped learning studies done by researchers regardless the disciple and level of education.

**Keyword** : Flipped learning; 21st Century Education; Student-centred learning; meaningful learning

**Topic** : Technology Enhanced Learning



#### [GS.AB-32] Successful ESL Learners' Strategy Use for Writing Skills

Rusreena Rusli, Harwati Hashim & Melor Md Yunus

Universiti Kebangsaan Malaysia

#### Abstract

Every learner has different ways and strategies in building good writing skills. Past researchers have suggested that good second language learners have greater awareness in strategies used in their learning. However, there are insufficient studies that focused on successful language learners from lower secondary students. Therefore, this study aimed to seek out the ESL learning strategies used for writing skills by lower secondary students. This study employed quantitative approach where 15 successful language learners from a public school were involved. Based on the findings, the most significant strategies used by successful language learners are reading, producing a draft before writing, and also using dictionary to acquire vocabulary. This study provides knowledge and understanding of the possible strategies that can be promoted to all second language learners in the future.

**Keyword** : Writing Skills; ESL; Learners' Strategy; good learners **Topic** : Creativity and Innovation

#### [GS.AB-33] Learners' Language Learning Strategies in Rural Secondary School

Pavitthra Arulchelvan, Harwati Hashim & Melor Md Yunus

Universiti Kebangsaan Malaysia

#### Abstract

Language is the medium of communication and instruction among learners around the globe. To be successful language learners, they employ various language learning strategies. This survey aims to explore the suitable language learning strategies and the categories applied by Form 2 learners in a rural secondary school in the Cameron Highlands district in enhancing their listening, speaking, reading, writing and vocabulary skills. Respondents replied to the self-administered questionnaires which were adapted from the study. Data were collected, analyzed and administered descriptively using valid percentages. Significant findings revolved that most learners favoured the writing and memory strategies in developing their language competencies. Listening strategy was least proposed by the learners. Based on the results, they were highly identified as audiovisual learners in performing language skills. Researcher believes that the results would be a turning point for language practitioners and educators in devising and conducting suggested materials and tasks considering the best language learning strategies preferred by the learners.

**Keyword** : Language Learning Strategies; Rural School; ESL; language competencies **Topic** : Other Relevant Field



#### [GS.AB-34]

#### 'Video Games': The Game Changer in Teaching Writing for ESL Learning

Haida Umiera Hashim, Melor Md Yunus & Harwati Hashim

Universiti Kebangsaan Malaysia

#### Abstract

Being able to write good academic writings has becoming a problem among English as Secondary Language learners. Learners tend to be bad in writing and not showing much interest in writing academic writings. One of the reasons for this is due to the conventional approach by educators that are making the learners to not feel motivated to write and due to the lack of writing skills in them. Due to that, in order to motivate students to be engaged in writing, an intervention of video games is used in teaching writing for ESL learning. The use of video games specifically Players' Underground Battle or widely known as PUBG is used in motivating learners to write. A few words or phrases were taken from the video games and learners were needed to write a page of writing out of them. Based on the findings, it can be seen that the intervention of video games has helped learners to be more motivated and creative in writing.

**Keyword**: Video Games; Writing; ESL Learning; Motivation; Creative Writing **Topic**: Creativity and Innovation

#### [GS.AB-35] MOOC for Training: A Review of The Variations of MOOC

Karmila Rafiqah M. Rafiq, Harwati Hashim & Melor Md Yunus

Universiti Kebangsaan Malaysia

#### Abstract

Internet of Things (IoT) is a common term used in the Industrial Revolution 4.0 (IR 4.0). As IoT is paving its way into various industries, the educational field is also one of the industries involved. Education is changing from formal classroom education to formal online education, where learning is not only restricted to face-to-face interaction but also virtually. This paper aims to identify the different models of MOOC which can be used as guidelines to carry out online training. The findings discussed on the different models of MOOC, whereby learning theories are used as a foundation for the models. Ranging from cognitivist to connectivist, the models of MOOC keep expanding to suit the current demands of learning. New models of MOOC, it can be seen that all models emphasized on providing the most effective learning environment for learners. The huge variation of MOOCs does not make the earlier models to be ineffective, yet the later models complement the earlier ones. Thus, the findings will be able to guide and provide an overview for educators and researchers in designing and developing MOOC, especially for training.

**Keyword** : MOOC; Formal Online Education; Blended Learning; Technology Enhanced Language Learning

**Topic** : Technology Enhanced Learning



# [GS.AB-36]

Synchronous Approach in Improving Students' Speaking Competency

Lim Lai Wah, Harwati Hashim & Melor Md Yunus

Universiti Kebangsaan Malaysia

## Abstract

Nowadays, the use of technology has changed teaching and learning experiences and it is seen to be effective in enhancing teaching and learning of English language. It enables learners to be more motivated and independent. Although it is challenging to have the best approach to enhance learners' speaking skills, it is proven by many researchers who have shown the positive outcomes of using technology in teaching and learning of English. Hence, we should admit that teaching and learning of English by using technology enhances teaching and learning of English speaking. Therefore, this article seeks to clarify the effectiveness of LiveSpeak in improving learners' speaking proficiency.

**Keyword** : Synchronous Approach; Speaking Competency; technology enhanced language learning; ESL; Speaking

**Topic** : Technology Enhanced Learning

## [GS.AB-37]

## Blending Humor and Animation in Learning English for Students in University

Anastasia Dewi Anggraeni, Helda Jolanda Pentury, Nini Adelina Tanamal

Universitas Indraprasta PGRI

## Abstract

Most pedagogical approaches lay particular stress on inculcating knowledge while ignoring the significance of students' learning skill, interest, attitude and confidence as well. Therefore, most students consider English learning as examination-oriented. Humor and animation can accommodate learning styles and enhance students' perceptions of the lesson being presented. Unfortunately, the fact is that the use of humor and animation in language teaching class in our place does not draw enough attention. Thus the new teaching and learning approach has not been widely applied. This study used both qualitative as well as quantitative methods to collect data. The qualitative method included class observation, interview, teaching material selection, analysis, and animation video. The quantitative method focused on class project results. Sixty students of English Education department of Indraprasta PGRI Jakarta third semester 2019 were chosen in this study. The results of the study clearly show that students' projects which were taught by means of humor and animation achieved better results. The results were exposed to contextualized language through the implementation of humor in animation. It indicates that there are potential benefits involved in the implementation of this new learning and teaching methodology, enrich students' vocabularies, comprehend the contexts in animation, create new animation styles, and, therefore, more attention should be paid to this issue in the future.

**Keyword** : Humor, Animation, Learning English **Topic** : Technology Enhanced Learning



## [GS.AB-38] Implementation of Simplex Algorithm to Optimize Toddler's Balanced Nutrition Needs with Minimum Costs

Qurrota A'yuni Ar Ruhimat, Risky Jannata Riftana, Tio Dharmawan

University of Jember

### Abstract

Nutrition is an important element needed by humans, including toddlers. The unfulfilled nutritional needs can cause several diseases, such as malnutrition and stunting. It can cause because of the inability to fullfill the nutrition needs of all family members with good quality and the lack of parental knowledge about nutritious food ingredients and how to feed properly. It is necessary to optimize the fulfillment of food nutrition for infants with a minimum cost. One of the efforts is to make the right combination of food ingredients with cost minimum so that it can be reached by all levels of society. This research was analyzed using Simplex Method with QM for Windows software. The results was obtained in the form of the amount of food that can be consumed by user to fulfill the nutritional intake needs along with the minimum cost.

Keyword : Nutrition Needs, toodler, Simplex Method, Minimum Costs

**Topic** : Computer Science

## [GS.AB-39]

## Developing Android-Based Teaching Module Using MIT app Inventor

Ria Fakhrurriana, Nurul Aini, Nila Zaimatus Septiana, Novi Rosita Rahmawati, Fitriatul Masitoh,

## IAIN KEDIRI

### Abstract

Providing the easy and flexible media to the learners in teaching and learning process is important in this advancement of technology era. In order to maximize the teaching learning process and students 'comprehension in academic reading, developing an appropriate teaching and learning media is crucial. The objective of this study was to develop an android-based teaching module for academic reading students using MIT App Inventor. The researchers developed the media which consisted of preliminary investigation, design stage, realization or construction, test, evaluation and revision, dissemination and implementation. The result is in the form of product, Android-Based Teaching Modules using MIT APP Inventor.

**Keyword** : Android-Based Teaching Modules, MIT APP Inventor **Topic** : Mobile and Digital Technology for Education



# [GS.AB-40]

## The Contribution of Achievement Motivation Towards Students' Responding Activity to Learning and Its Implication In Guidance and Counseling

Rizky Andana Pohan, Muhammad Putra Dinata Saragi, Dika Sahputra, Syaiful Indra, Rina Suryani, Erfan Ramadhani, Ramtia Darma Putri

IAIN Langsa, UIN Sumatera Utara, UIN Sumatera Utara, UIN Ar-raniry, Universitas Negeri Medan, Universitas PGRI Palembang, Universitas PGRI Palembang

### Abstract

Due to the Responding Activity to Learning by students and many researchers consider this problem caused by the higher level of class and the low motivation of student achievement. This study seeks to export the contribution between students 'achievement motivation to respond to students' activities in learning. The proportional stratified random sampling method was used to select 254 students from one of the state vocational high school in the Deli Serdang District as a research sample. The scale of Achievement Motivation and Activities Responding to learning are compiled with a Likert scale and have been tested for validity and reliability to investigate each variable. Descriptive analysis results show that students' achievement motivation is in the high category and activities responding to student learning in the high category. The results of the regression test analysis showed that student achievement motivation contributed significantly to the activities of responding to student learning. The results of this test indicate that achievement motivation is one of the variables that can predict responding activities in student learning. The pedagogical suggestion is offered to guidance and counselling teachers to give attention to student achievement motivation variables in the preparation of counselling service programs.

**Keyword** : Achievement Motivation, Responding Activity **Topic** : Virtual Reality for Learning



# [GS.AB-41]

Exploring the Implementation of Gamification in Second Language Learning

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## Abstract

Gamification has been one of the most discussed teaching approaches in education field. Researchers in second language learning have reported multiple results on the implementation games dynamics and mechanics in non-game contexts. Even though numerous studies have reported positive feedbacks of gamification in classroom learning, a number of studies have also presented contradicted results on the abovementioned situation. In this study, a systematic literature review has been conducted to review related researches conducted on gamification in English as a Second language (ESL) learning in the recent five years (from 2015-2019). Although majority of the studies highlighted the positive learning outcomes of gamification, none of the studies presented a total agreement of the effectiveness of gamification is generally evaluated from students' learning performance, motivation and enjoyment throughout the learning session. Findings of this study presented a comprehensive summary of current situation in researches related to gamification in an ESL learning situation and provide a useful suggestion for future researchers to further investigate the effectiveness of gamification in language learning.

**Keyword** : Gamification, English As A Second Language, Game-Based Learning, Technology-Enhanced Language Learning

**Topic** : Technology Enhanced Learning

## [GS.AB-43]

### Fear of Missing Out (FoMO) Contribution to Phubbing: West Sumatera Perspective

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Universitas Negeri Padang

### Abstract

Developments of technology in millennial era are increasing in the educational environment, one of the technologies that become the basic needs of everyone is a smartphone. Smartphones have a negative impact on changes in student behavior, social interaction that is done directly has turned into communication with the help of smartphones and internet access. The purpose of this study is to describe the contribution of FoMO to Phubbing in school. The sample consisted of 1534 male students (n = 646), female (n = 888) spread in junior high schools (n = 295), high schools (n = 734), and vocational high schools (n = 505), which was selected by using the Purposive Random Sampling technique. Data was collected through two questionnaires administered online, namely: (1) internet FoMO (Fear of Missing Out) instruments, and (2) Phubbing instruments. The instrument used was a Likert scale model, with 5 answer choices. The results showed that the contribution of internet FoMO (X) was significant towards phubbing behavior (Y), seen from the contribution given by FoMO internet by 35.2% to students' phubbing behavior.

**Keyword** : Fear of Missing Out (FoMO), Phubbing, Predictor, Smartphone **Topic** : Mobile and Digital Technology for Education



# [GS.AB-44]

## The TIRI: A Rasch-Validated Revision of Natural Disasters Victims Resilience

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Universitas Negeri Padang

## Abstract

This article presents the validation of Taufik & Ifdil Resilience Inventory (TIRI) in the context of Indonesian post-natural disasters. The quantitative research tests validity of TIRI with Rasch modeling analysis. TIRI used to measure the resilience of students affected by natural disasters, the number of items 43 and developed by the Indonesian Institute for Counseling, Education and Therapy (IICET) research team which is coordinated by the Research Center Universitas Negeri Padang. This research was conducted three trials/cycle, namely: 1st cycle = 308 students, 2nd cycle = 314 students, and 3rd cycle = 477 students from six Indonesia regencies. Results showed the instrument resilience for victims of natural disasters is valid and reliable (person reliability is 0.68 and item reliability is 0.99) with a total of 25 items (Raw variance explained by measures = 23.5% with expected values of 24.3%) valid from the total number of instruments of 43 items, that means items already represent measurements for the resilience of victims of natural disasters.

**Keyword** : Resilience, Post Natural Disasters, Validity, Reliability **Topic** : Instrument and Measurement

## [GS.AB-45]

## POTENSIA Android App: An Alternatif Software for Career Trends Exploration Based on Personality Types

## Zadrian Ardi, Maysitoh, Ifdil, Hendra Hidayat

# Universitas Negeri Padang Universitas Negeri Padang Universitas Negeri Padang Universitas Bung Hatta

### Abstract

Exploration and career preparation are important aspects in individual activities. The processes are sustainable in accordance with the stages of human development. The contribution of career exploration will have an impact on the accuracy of the choice of type of work and career path in the future. However, a common phenomenon in Indonesia is the exploration stage are unable to determine career choices appropriately, incompatibility of personal tendencies with advanced study options in college and incomplete career information. This phenomenon requires the existence of a method and approach that is able to reach individuals who are in the stage of career exploration. The development effort is based on one approach in career planning through personality types adapted to occupational environments. The development of Android software "POTENSIA" is one of the strategic alternatives in helping individuals explore career trends and make career decisions. This software development involves the Java-based Waterfall model. To support the development, a preliminary study was also conducted on the suitability of student career choices and the tendency to accept mental health services through the Android application.

**Keyword** : Software development, career application, career exploration **Topic** : International Journal of Innovation, Creativity and Change



# [GS.AB-46]

## Exploration of Active Smartphone User's Mental Health and the Opportunities of Internetbased Therapy Approach

Indah Sukmawati, Zadrian Ardi, Maysitoh, Afdal, Ifdil

Universitas Negeri Padang

## Abstract

Internet is the latest technology developed for various sectors of life. Ease of access, simplicity, huge data storage, connectivity and the other's conveniences provided by this technology. One implication of this technological development is implemented through the use of Smartphone. This device brings a major change in daily life and human social complexity. Indonesia as a developing country has the largest Smartphone use potential in Asia. However, excessive use raises the new mental health issues for individuals. The intervention of mental health services in Indonesia has not been able to reach all clients, plus the use of Internet-based services is unknown and not yet measurable through various researches. This study aims to explore the mental health condition of active users of Smartphone in Indonesia and internet-based usage opportunities for its services. This preliminary study consisted of 174 respondents spread throughout across Indonesia with diverse demographics. The data findings were analyzed by using network psychometrics and Rasch analysis. The results showed that in general, some mental health disorder was found on users who actively use Smartphone related to social conditions. Opportunities internet use internet technologies to reach individuals with disturbed mental health conditions are significant. Respondents want internet-based services to be

Keyword : Smartphone, Mental Health, Internet-Based Therapy Approach

**Topic** : International Journal of Innovation, Creativity and Change

# [GS.AB-47]

## Konseline App; the future of distance counseling and therapy application based on Android technology

### Zadrian Ardi, Neviyarni, Daharnis

## Universitas Negeri Padang

### Abstract

The internet is one of the main drivers in technological innovation and industrial revolution which has an impact on various sectors of human life. One implication of this technology is implemented in the development of mobile operating system technologies such as Android and iOS. However, the use of this technology in mental health interventions is still limited. This research aims to develop an Android-based platform that can be used to connect counselors with clients in the context of mental health interventions and long-distance/remote counseling services. This research and development involved 10 counselors and clients for limited assessment and 174 respondents in the preliminary study regarding application content. The findings of research data were analysed using facet from Rasch Analysis. The results of the study showed that the applications developed fulfilled the applicable requirements and were accepted by respondents as alternatives to mental health interventions. The study and level of feasibility and acceptance of respondents to the applications are discussed.

**Keyword** : : Distance counseling, Android application development, internet-based counselings **Topic** : International Journal of Innovation, Creativity and Change



## [GS.AB-48]

### The Smart Solar Powered Hydroponics System For Palm Nursery

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#### Abstract

This research was conducted as an initial step to hatch palm oil plantation using the hydroponic method. This method is carried out with considering the high water requirements at the prenursery stage. In line with technological advances in electronics and IT, the hatchery technique can be developed through the development of smart hydroponics systems. This system can read measurements of various soil fertility parameters such as pH, temperature, mineral content, and soil moisture. The sensor readings are then displayed on a smartphone with an app designed by MIT app Inventor that enable users to receive feedback sensor readings. Based on the research results obtained, the app has been made able to measure well the fertility parameters of hydroponic plants in the pH range 6-6.5, the temperature is maintained at 18-25 degrees Celsius and TDH meters at 800 ppm, 1000 ppm, 1200 ppm and 1400 ppm. The need of power supply for water irrigation and microcontroller power supply is supported by 30 WP of solar panel.

**Keyword** : palm, hydroponics, smart system, pre-nursery **Topic** : Instrumentation and measurement

## [GS.AB-49]

# The Use of Kahoot! to Create Engagement and Active Learning Environment in ESL Writing Classroom

Melor Md Yunus, Harwati Hashim, Zaidatul Shima Yahya, Farah Sabrina Sabri, Adriana Nasuha Nazeri & Haida Umiera Hashim

Universitas Kebangsaan Malaysia

### Abstract

This paper is to examine the use of Kahoot! for teaching writing in ESL classroom to create engagement and active learning was being observed in a third-year teaching writing class. The purpose of this study is to measure the effectiveness of Kahoot! for teaching writing in ESL classroom. This was accomplished through a quantitative design which is a survey regarding the use of Kahoot among UKM TESL third year undergraduate students. A total of forty undergraduates TESL students were selected as participants for this quantitative research and the questionnaire was designed by using online form via Google form. The survey in this research is focusing on how effective Kahoot in creating engagement and active learning for teaching writing. The results show that students think the Kahoot! implementation helps them to enjoy the class compared to the traditional method. The findings also show how the use of Kahoot can create engagement and active learning among students for teaching writing in the ESL classroom.

**Keyword** : Kahoot!; technology-enhanced language learning; e-Learning; game-based learning; students' engagement; active learning

**Topic** : Technology Enhanced Learning



# [GS.AB-50]

## ESL Undergraduates' Perception towards The Use of MOOC Embedded Flipped Classroom

Melor Md Yunus, Harwati Hashim, Mohammad Azreen Ariffin, Alwani Izzati Shahudin, Wan Anisa Hafiqa Hussain & Karmila Rafiqah M. Rafiq

### Universiti Kebangsaan Malaysia

### Abstract

The rapid advancement in technology has given rise to the development of Massive Open Online Course (MOOC). Thus, the usage of MOOC is seen as among the preferred method which is embedded in a flipped classroom approach. This study investigates ESL undergraduates' perception towards the use of MOOC embedded flipped classroom in learning one of the courses which is Teaching Writing in an ESL Context. Quantitative research design was employed in this study where questionnaire where used as the instrument. Data were collected among English as a Second Language (ESL) undergraduates at a faculty in one of the public universities in Malaysia. Data were analysed using percentages and frequency. Findings of this study showed that majority of respondents give a positive feedback regarding the use of MOOC embedded flipped classroom. This implies that the use of MOOC should be highlighted and prioritize in this current pedagogy.

**Keyword** : Massive Open Online Course (MOOC); flipped classroom; technology-enhanced learning; English as a Second Language (ESL)

Topic : Technology Enhanced Learning

# [GS.AB-51]

### Scaffolding Approach in Learning to Teach Writing in an ESL Context

Melor Md Yunus, Harwati Hashim, Nurdania Nazuwa Rusadzeli, Nurul Syasika Tijan Bolkan, Dineswari Segakumaran & Fetylyana Nor Pazilah

### Universiti Kebangsaan Malaysia

### Abstract

This paper aims to identify the perceptions of Teaching English as Second Language (TESL) students' perception on the scaffolding approach in learning to teach writing ESL context. Total of 37 students who are doing their Bachelor's degree in Teaching English as Second Language in a university in Malaysia participated in the research. Data were collected using survey and were analyzed using frequencies and percentages. The data revealed that most of the respondents have a good perception towards scaffolding approach and generally almost all agreed that it has positive impacts in teaching writing. This has shown that scaffolding approach is an effective way to enhance students' potential in learning specifically in learning to teach writing.

Keyword : Scaffolding; teaching writing; writing skills; ESL context

**Topic** : Creativity and Innovation



# [GS.AB-52]

## A Thematic Review of Blended Learning at Each Educational Level in Indonesia

## Sugiyanto, Syamsu Yusuf

## Yogyakarta State University, Indonesia University of Education

### Abstract

Parents' view towards romantic relationship and guiding in youth children age of junior high school The writing of this article was aimed to explain the parents' view of romantic relationships and mentoring in early adolescents of junior high school age. This study used the indigenues psychology approach. The research subjects were parents of 123 students in Yogyakarta Indonesia. Parents were asked questions about what is known about romantic relationships, what parents do to accompany their children who have a romantic relationship and what parents do to accompany their children who have not had a romantic relationship. The results showed that parents had a view of romantic relationships in early adolescents. The results of the study also identified assistance actions taken by parents towards early adolescents who experienced romantic relationships and had not experienced a romantic relationship. The implication of the study results is that parents need to understand the task of early adolescent development and mentoring to go through adolescence by minimizing conflict

**Keyword** : Keywords: parents, romantic relationships, early adolescents **Topic** : Counseling Relationships, Marriage and Family Therapy (CRMFT)

## [GS.AB-53]

## Development of Multimedia Learning in Hydroponic Farming on Children with Hearing Impairment

## Safaruddin, Johandri Taufan

### Universitas Negeri Padang

### Abstract

Agriculture is one of the vocational skills types in the 2013 curriculum. Almost every subject will relate to agricultural material, such as farming, getting to know plants, etc. However, some Special Schools in Padang have very limited yards so children with hearing impairment are farming by using polybags. Based on these problems, this article will discuss the development of multimedia learning in hydroponic farming. This study used the research and development (R&D) method. In R & D, Borg and Gall have 10 steps in the process but, this research is limited to the operational product revision (until step six). Design validation used an educational expert in teaching children with special needs, an expert in educational technology, and an expert in hydroponics. To find out the success of this learning multimedia, the data were analyzed using the non-parametric Wilcoxon signed-rank test. The result showed that the subject's ability to grow crops increased. Based on these results it can be concluded that this multimedia learning in hydroponic farming activities in Special Schools.

**Keyword** : Multimedia, Hydroponic, Hearing Impairment, Special School **Topic** : Multimedia Application in Education



# [GS.AB-54]

## Utilization of Empty Palm Empty Waste As A Material for Printing Wrapping Paper

Rachmawati Apriani, S.T., M.T, Hanifadinna, S.T., M.T, Amelia Rahmatika, S.Si., M.T, Early Harison Mahardhika, Iyas Majita BTR, Erlita Kusuma Andani, Alby Venrian, Frans Ferdinand

Institut Teknologi dan Sains Bandung

## Abstract

Printed writing paper using blank coconut raw material is an alternative to overcome the scarcity and increasingly expensive paper raw material from the original pulp (virgin pulp). It also can be used palm oil which has been a waste from the palm oil industry which is utilized as a more useful material from printing paper that contains economically. Each crude palm oil mill will produce dry TKKS on average 7-15 tons / hour, so for each year it can produce 55440-118800 tons (Erwinsyah, 2000). With the increasing area of oil palm cultivation, each time the TKKS will increase will also increase. The results of research developed by the Pulp and Paper Center showed that OPEFB can be made with high strength pulp and this pulp can be used as raw material for printed writing paper, cement substitution paper and HVO paper. The oil palm empty fruit bunch waste is quite effective in making pulp white which can produce a brightness value of 32.01 and an L \* value of 77.54. Then the remaining oil in the empty oil palm bunches can be removed by washing so that the oil reserves can be reduced. The most effective method in the pulping

Keyword : Oil palm empty fruit bunches; Printed writing paper

Topic : Creativity and Innovation

# [GS.AB-55]

# The Body Image Profile Of Student Of Universitas Negeri Padang In Terms Of Their Admission

Verlanda Yuca; Puji Gusri Handayani; Daharnis Daharnis; Zadrian Ardi; Elrisfa Magistarina; Herman Nirwana; Lisa Putriani; Frischa Meivilona Yendi; Rahmi Dwi Febriani; Triave Nuzila Zahri; Nurfarhanah Nurfarhanah

Universitas Negeri Padang

### Abstract

The most basic human needs are physiological needs. Human physical appearance, as a part of physiological needs, is considered as an essential part of people's lives. That essential part determines the formation of body image (self-image) in the community. Body image is a mental picture of the state of the human body. That is how people give values of the size and shape of their bodies or others' opinions about them. This study aims to describe the body image of students in terms of their admission. This study uses a quantitative approach to the type of descriptive research. The sampling technique used Simple Random Sampling on 161 students of Universitas Negeri Padang. Data collection techniques through questionnaires with descriptive analysis. The research findings show that a picture of the body image condition of UNP students on average is in the medium category with the reliability of 0.824.

**Keyword** : Body image; students

**Topic** : International Journal of Innovation, Creativity and Change



# [GS.AB-57]

## Cyber supervision for counselling education in South East Asia

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Universiti Pendidikan Sultan Idris, Universitas Sriwijaya, Universitas Malang

## Abstract

This article proposes a conceptual framework to the world of counselling regarding the application of cyber supervision in the counsellor's educational process, especially in the practicum phase. With this in-depth literature study, we explore the development of supervision both face to face and online. We analyze the advantages and disadvantages of Cyber supervision for counsellor education. The social situation of Southeast Asia is also discussed specifically in relation to public acceptance with this cyber supervision. We conclude that the application of cyber supervision will provide an alternative reinforcement and equal distribution of counselor identity in regions with broad geographical structures.

Keyword : Cyber Supervision, Counselling Education, Counsellor In TrainingTopic: Multimedia Application in Education

## [GS.AB-58]

## Utilization Of Kraft-Lignin From Black Liquor Waste Extraction As An Agent To Improve The Quality Of Physical Properties Of Fine Paper

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### Abstract

Lignin is one of the constituent component of wood, but the presence of lignin can be a nuisance in the paper making process. Lignin will reduce the physical and optical properties of paper. The objctive of this study is to determine the advantages of kraft-lignin and its impact to modify cationic starch on the physical properties of fine paper. The study was conducted in steps. In the first step extraction was carried out to obtain the kraft-lignin, by using two extraction methode that is acid extraction with termal and acid extraction with centrifuge. Kraft-lignin was tested from both methods, the optimum test value will be continued at the coocking stage into resin-lignin. Resin-lignin will be a modified compound with level addition 3% and 6% of the dry weigh of cationic starch, then it will be applied to the handsheet with 13 variation, namely blank; , DS existing (2 Kg/TP, 4 Kg/Tp, dan 6 Kg/TP), cationic starch emultion+resin-lignin 6%, cationic starch substitution + resin-lignin 3%, and cationic starch substitution+resin-lignin 6%. Variation of cationic starch substitution+resin-lignin 6% at level addition 6 Kg/TP indicates the best value of physical strength. Especially on tensile strenght, wet tensile strenght, bursting, tearing, and internal bonding value.

**Keyword** : Kraft-Lignin; Lignin-Resin; Modified Cationic Starch; Black Liqour **Topic** : Creativity and Innovation



# [GS.AB-59]

## Development of AUM SP.1 PTSDL Based of Online System for Reveal of Student Learning Problem

Ifdil Ifdil, Tjung Hauw Sin, Zadrian Ardi, Beru Amalianita, Nilma Zola, Yola Eka Putri, Rima Pratiwi Fadli

Universitas Negeri Padang, Indonesia Indonesian Institute for Counseling, Education and Therapy, Indonesia

## Abstract

Technology and information have evolved from various fields, with one such field being Guidance and Counseling. As such, school counselors must be able to keep the balance between the pace of technological development with service processes that require school counselors to use complementary technology. One such example is in the assessment process. AUM SP.1 PTSDL is an online system application that can be used by school counselors in the assessment process to reveal learning problems. This application can support school counselors in making more assessments without requiring much time and energy compared to use manual processing. Processing the instrument manually is an inefficient use of the school counselor's time. As such, counselors have difficulty using AUM PTSDL for the assessment process. The development of information technology that is present today fosters the need for counselors to use applications or media that can facilitate their tasks through allowing them to use their energy and time more effectively and efficiently

**Keyword** : Online System, AUM SP.1 PTSDL, Student Learning Problem **Topic** : Multimedia Application in Education

## [GS.AB-60]

## Developing Assistive Technology For Students With Hearing Impairment at University

Yoga Budhi Santoso, Eka Yuli Astuti, Teti Ratnawulan, N. Dede Khoeriah, Luki Lukmanul Hakim

### Universitas Islam Nusantara

## Abstract

Lip reading is a major method for individual with hearing impairment to understanding speech by visually interpreting the movements of the lips. Lip reading requires attention constantly to obtain information completely. Actually, students with hearing impairment acknowledge that it is difficult to do lip reading in classroom. They have to do other activities while lecturers delivered the materials such as write a note or ask friends. So the information conveyed by the lecturers some is missing. This research aims to develop tools as assistive technology for students with hearing impairment. This tools will assist them to received materials from lecturers easily. The devices is an android based application that can convert sounds or speech into text in real time which can be accessed and stored by student's smartphones or laptops. This study involved 3 students with hearing impairment and 4 lectureres as validators. The result of validation and testing shows that this assistive technology can assist students to understand presented material and easy to use by lecturers and students.

Keyword : Assistive Technology, Hearing Impairment, Inclusive Education

**Topic** : Creativity and Innovation



# [GS.AB-61]

## Readiness for Marriage Among Students Base of Gender, Ethnic, And Economic Strata

Lisa Putriani, Taufik, Daharnis, Riska Ahmad, Frischa Meivilona Yendi, Rahmi Dwi Febriani, Verlanda Yuca, Triave Nuzila Zahri, Puji Gusri Handayani, Nurfarhanah

Universitas Negeri Padang

### Abstract

This research purpose are to analyzed of the self readiness of students to get married base of gender, ethnic, and economic strata. The research method was ex post facto by used a factorial design 2 x 2 x 2. The sample were 300 students used purposive random sampling technique. The instrument used Student Readiness Inventory (SRI). Data analyzed used of variance (ANOVA). The result showed: (1) the level of self readiness of graduate students to get married in general were in the high category, (2) the level of self readiness men and woman of graduate students to get married based on the gender, (3)the level of self readiness Patriarkhat and Matriarkhat culture of graduate students to get married were in the high category, and there was no difference based on the cultural background, (4)the level of self readiness graduate students to get married base of economic strata (have a regular job and do not have a permanent job) were in the high category, and there was no difference

**Keyword** : Self Readiness For Married, Gender, Background Culture, Economic Conditions **Topic** : Other Relevant Field

# [GS.AB-62]

## Development of a New Model of Parenting Training for the Formation of Discipline Character of Elementary School Students

## Happy Karlina Marjo

### Universitas Negeri Jakarta

### Abstract

The purpose of this study was to develop a training model for Elementary School Student Discipline Character Building. This research is a pilot project. The sample in this study was 15 parents of students in three schools, and three experts. The instrument used was the Scale of Parenting Student Character (SPPKDS) and Focus group discussions. Research data analysis techniques using descriptive techniques with percentage and analytical themes and Wilcoxon Test to determine the suitability of the experts. This research has resulted the model is valid and reliable, all three experts agree this model can be used. This model can be used by counselors, teachers and parents for the formation of elementary school student character.

Keyword : Parenting, Discipline Character, Elementary School Students

**Topic** : Technology Enhanced Learning



# [GS.AB-63] The Analysis Of Learning Resource Utilization In The Elementary Schools Of West Sumatera

## Abna Hidayati, Alwen Bentri, Ulfia Rahmi

Universitas Negeri Padang

## Abstract

The appliance of learning resource and media in elementary schools is quite diverse depending on the learning needs. The current phenomenon happened that the common usage of learning resource is most likely to textbooks provided by the teachers. This study aims to identify the types of learning resource that is frequently utilised in elementary schools in West Sumatera. The method used in this research is quantitative method. The population in this study were all elementary school students who were in the region that represented the population namely Padang City, Padang Pariaman Regency representing the coastal area and Padang Panjang City and Tanah Datar District representing the highland area. Samples were taken purposively at the target schools according to certain criteria, namely as many as 500 people. The instrument used in this study was a questionnaire. The data analysis technique in this study is the percentage technique. The results of statistical analysis showed that the number of learning resources tends to not suitable with learning needs. It was found that the learning resources which applied in the schools were textbooks, model, mockups, and the globe. However, some of them had no specific instructional goals. This study gave recommendations to policymakers to

**Keyword** : The Availability, Learning Resources, Printed, Electronic, Elementary School **Topic** : Technology Enhanced Learning

## [GS.AB-64]

# Eye Movement Desensitization and Reprocessing: An alternative effective tool for reduction of academic stress?

Frischa Meivilona Yendi, Reza Tririzky, Firman Antoni, Indah Permata Sari, Ifdil Ifdil, Rahmi Dwi Febriani, Zadrian Ardi, Afdal Afdal, Lisa Putriani, Verlanda Yuca, Triave Nuzila Zahri, Puji Gusri Handayani

Universitas Negeri Padang

### Abstract

Stress is a mental disorder faced by a person due to pressure arising from an individual's failure to meet his needs or desires. One stress experienced by students is academic stress. This condition is due to students' subjective perceptions of the existence of academic demands that cause responses to students in the form of physical reactions, behaviors, thoughts, and negative emotions. If not handled properly, it will disrupt the effectiveness of learning and absorption of information on students. This study aims to reveal the effect of Eye Movement Desensitization and Reprocessing (EMDR) in reducing student academic stress. The research method is an experimental study conducted with one-group pretest posttest design. The subjects in this study were 15 students who had never been given an EMDR before. The instrument used was an adaptation of the Academic stress inventory of students at universities and colleges of technology from Lin and Chen. Analyze the data using the Rasch Model. The results show that EMDR is proven to be one of the effective tools to reduce academic stress on students.

Keyword : EMDR, Academic Stress Topic : Other Relevant Field



# [GS.AB-67]

### The Effectiveness of Group Guidance of Symbolic Modeling Technique Improve Self-Efication of Students

Tarno, Rasman Sastra Wijaya, Unhaluddin T. Kurniawan, Risma Irmayana

Indonesia University of Education

Universitas Muhammadiyah Buton

### Abstract

The purpose of this study was to examine the effectiveness of group counseling services for effective symbolic modeling techniques to improve the self-efficacy of class IX students of SMP Negeri 3 Baubau. The experimental design used in this study was a one-group pretest and posttest design. The population in this study were 72 class IX students of SMP Negeri 3 Baubau, totaling 72 people consisting of 3 classes. The sample in this study was grade IX students of SMP Negeri 3 Baubau who had low self-efficacy as many as 13 students who were used as a sample of a treatment effectiveness test. Testing the validity of the self-efficacy scale using the Analyze Correlate Bivariate test through the help of a computer program statistics product and service solution (SPSS) 16.0 for windows. Known value of Z-3,185 with Asymp. Sig (2-tailed) value of 0.001 in this study is smaller than < 0.05, it can be concluded that the Guidance Services Group of symbolic modeling techniques is effective to improve the self-efficacy of class IX students of SMP Negeri 3 Baubau which is done successfully significantly or effectively to be carried out, this means, the hypothesis is accepted.

Keyword : Guidance group; model symbolic; self- efficacy

**Topic** : Other Relevant Field

## [GS.AB-68]

## Effectiveness of Solution Focused Brief Therapy in Reducing the Level of Mathematics Anxiety of Elementary School Students

Daharnis, Zadrian Ardi, Verlanda Yuca, Ifdil Ifdil

### Universitas Negeri Padang

### Abstract

Learning objectives will be achieved if there is a change in mindset, paradigm and student behavior. This achievement applies to all content and learning material, including mathematics. However, many factors can affect the process of transforming learning material, one of which is the condition of students' anxiety about mathematics. The results of research conducted previously prove that students experience a high level of anxiety, especially related to the task and mastery of the subject matter content. This research aims to treat students who experience high mathematical anxiety through the Solution Focused Brief Therapy (SFBT) approach. This study involved five students who were indicated to have high mathematical anxiety. The anxiety levels was measured by Mathematic Anxiety Rating Scale - Elementary Form (MARS-E) and analysed using Rasch models. Research results prove that the SFBT approach can reduce the level of mathematical anxiety in the domain of content mastery.

Keyword : Mathematics anxiety, solution focused brief therapy, psychological approach

**Topic** : Mathematical physics

