

Series: [Advances in Social Science, Education and Humanities Research](#)

# Proceedings of the Eighth Southeast Asia Design Research (SEA-DR) & the Second Science, Technology, Education, Arts, Culture, and Humanity (STEACH) International Conference (SEADR-STEACH 2021)

---

## PREFACE

---

Southeast Asia Design Research (SEA-DR) International Conference is an annual conference held in the Southeast Asia region with the aim of developing the design research field in Education. The conference also aims to disseminate research results related to design research both for policy interests and for practical use in their application in various educational disciplines. The 8th SEA-DR provide excellent opportunities for academics, lecturers, teachers, students, educators, researchers, and educational stakeholders to share knowledge and research findings and to promote best practices in design research. The topic of interest covers all theoretical and practical aspects of design research in the fields of teaching and education in science, technology, engineering, mathematics, sports, languages, management, economics, and other social sciences. The 8th SEA-DR International Conference was combined with The Second Science, Technology, Education, Arts, Culture, and Humanity (The 2nd STEACH) International Conference, which was first held on 29 October 2018.

The main theme for this joint conference is “Empowering creative education for freedom of teaching and learning” with the main scope of the accepted paper is all the theoretical and practical aspects of design research in the fields of education in science, technology, engineering, mathematics, sports,

art & language, and cultural & humanities.



## Atlantis Press

Atlantis Press – now part of Springer Nature – is a professional publisher of scientific, technical & medical (STM) proceedings, journals and books. We offer world-class services, fast turnaround times and personalised communication. The proceedings and journals on our platform are Open Access and generate millions of downloads every month.

For more information, please contact us at: [contact@atlantis-press.com](mailto:contact@atlantis-press.com)

- ▶ PROCEEDINGS
- ▶ JOURNALS
- ▶ BOOKS
- ▶ POLICIES
- ▶ MANAGE COOKIES/DO NOT SELL MY INFO
- ▶ ABOUT
- ▶ NEWS
- ▶ CONTACT
- ▶ SEARCH

---

[Home](#) [Privacy Policy](#) [Terms of use](#)



Copyright © 2006-2023 Atlantis Press – now part of Springer Nature

Part of **SPRINGER NATURE**

[PROCEEDINGS](#) | [JOURNALS](#) | [BOOKS](#)

---

Search

Series: **Advances in Social Science, Education and Humanities Research**

# Proceedings of the Eighth Southeast Asia Design Research (SEA-DR) & the Second Science, Technology, Education, Arts, Culture, and Humanity (STEACH) International Conference (SEADR-STEACH 2021)

---

## ORGANIZERS

---

### **Steering Committee Chairman**

**Prof. Dr. Bambang Yulianto, M.Pd.**

Universitas Negeri Surabaya, Indonesia

### **Steering Committee Members**

**Prof. Dr. Suparji, M.Pd.**

Universitas Negeri Surabaya, Indonesia

**Prof. Dr. Wasis, M.Si.**

Universitas Negeri Surabaya, Indonesia

### **Organizing committee chairperson**

**Prof. Dr. Tatag Yuli Eko Siswono, M.Pd.**

Universitas Negeri Surabaya, Indonesia

### **Organizing committee members**

**Prof. Dr. Hariyati**

Universitas Negeri Surabaya, Indonesia

**Prof. Dr. Mustaji**

Universitas Negeri Surabaya, Indonesia

**Unit Three Kartini, S.T., M.T., Ph.D**

Universitas Negeri Surabaya, Indonesia

**Dr. Harti, M.Si.**

Universitas Negeri Surabaya, Indonesia

**Dr. Binar Kurnia Prahani, M.Pd.**

Universitas Negeri Surabaya, Indonesia

**Ahmad Wachidul Kohar, M.Pd**

Universitas Negeri Surabaya, Indonesia

### **Scientific Committee**

**Dr. Paryono**

SEAMEO Voctech, Brunei Darussalam

**Prof. Hiroki Fujii, Ph.D.**

Okayama University, Japan

**Prof. Susan Ledger**

University of Newcastle, Australia

**Prof. Dr. Kulyash Kaimuldinova**

Abai University, Kazakhstan

**Assoc. Prof. Dr. Toh Tin Lam**

National Institute of Education, Singapore

**Prof. Drs. Slamet Setiawan, Ph.D.**

Universitas Negeri Surabaya, Indonesia

**Assoc. Prof. Dr. Michiel Doorman**

Utrecht University, The Netherlands

**Prof. Dr. Sutarto Hadi**

Universitas Lambung Mangkurat, Indonesia

**Prof. Dr. Zulkardi, M.I.Kom., M.Sc.**

Universitas Sriwijaya, Indonesia

**Dr. Wanty Widjaja**

Deakin University, Australia

**Prof. Dr. Rahmah Johar, M.Pd.**

Universitas Syiah Kuala, Indonesia

## **Editorial Board**

**Dr. Rully Charitas Indra Prahmana, M.Pd.**

Universitas Ahmad Dahlan, Indonesia

**Dr. Masitah Shahrill**

Universiti Brunei Darussalam, Brunei Darussalam

**Dr. Hongki Julie, M.Si.**

Universitas Sanata Dharma, Indonesia

**Dr. Agung Lukito, M.S.**

Universitas Negeri Surabaya, Indonesia

**Prof. Dr. Hj. Sri Joeda Andajani, M.Kes.**

Universitas Negeri Surabaya, Indonesia

## Atlantis Press

Atlantis Press – now part of Springer Nature – is a professional publisher of scientific, technical & medical (STM) proceedings, journals and books. We offer world-class services, fast turnaround times and personalised communication. The proceedings and journals on our platform are Open Access and generate millions of downloads every month.

For more information, please contact us at: [contact@atlantis-press.com](mailto:contact@atlantis-press.com)

- ▶ PROCEEDINGS
- ▶ JOURNALS
- ▶ BOOKS
- ▶ POLICIES
- ▶ MANAGE COOKIES/DO NOT SELL MY INFO
- ▶ ABOUT
- ▶ NEWS
- ▶ CONTACT
- ▶ SEARCH

---

[Home](#) [Privacy Policy](#) [Terms of use](#)



Copyright © 2006-2023 Atlantis Press – now part of Springer Nature



Part of **SPRINGER NATURE**

[PROCEEDINGS](#) | [JOURNALS](#) | [BOOKS](#)

---

Search

Series: [Advances in Social Science, Education and Humanities Research](#)

## Proceedings of the Eighth Southeast Asia Design Research (SEA-DR) & the Second Science, Technology, Education, Arts, Culture, and Humanity (STEACH) International Conference (SEADR-STEACH 2021)

---

ARTICLES

---

Search

[+ Advanced search](#)

SEARCH

56 articles

---

### Proceedings Article

## Unfolding the Practical of Numerical Literacy for Specialist in Teaching Mathematics

Mohamad Rif'at, Sugiatno Sugiatno

This research aims to explain the typical rationale design of mathematics education research for a teacher to become a specialist in teaching mathematics. The structure shows learning environment as a natural way to address the teachers in their primary role and as the approach for effectively improving...



[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Development of STEM Animation Learning Media with Feedback to Facilitate Students' Critical Thinking Ability on Global Warming Materials

Fitria Lafifa, Parno Parno, Erti Hamimi, A M. Setiawan

Critical thinking skills are needed to face the 21st century. PISA 2018 data shows that students' critical thinking skills are still low. The Earth is experiencing an increase in temperature so it requires a solution to overcome it. STEM animation learning media with feedback can increase student reality...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Linguistic Challenges in Solving Mathematics Word Problems: A Case of EFL University Students

Namirah Fatmanissa, Maria N. R. Novianti

One of the biggest challenges English as Foreign Language (EFL) learners face in solving Mathematics word problems at the English college level is understanding the information presented through that language. This study aimed to investigate the importance of language in Mathematics word problems tests...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

## Designing *Siri' na Pacce* Values-Based Learning Model Nurturing Local Wisdom in Elementary School

Abdul Azis, Kokom Komalasari, Sapriya Sapriya, Rahmat Rahmat

This study aimed to propose an appropriate learning model that promotes siri' na pacce to nurture and strengthen the character of elementary school students. Siri' na pacce is the local wisdom of the Bugis-Makassar tribe, one of the prominent tribes in Indonesia. This study was educational design research....

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

### Proceedings Article

## Improving Student Geometry Problem-Solving Skills Through Spatial Training

Yenny Safrina, M. Ikhsan, Cut M. Zubainur

Problem-solving is an integral part of learning mathematics, and geometry is one of the basic subjects of mathematics. However, students' geometric problem-solving skills are relatively lacking due to some factors, including spatial skills. There is a significant relationship between spatial skills and...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

### Proceedings Article

## Development of Science E-module Based on SETS (Science, Environment, Technology, and Society) with Formative Assessments to Improve Critical Thinking Ability of Grade IX Students on Biotechnology Materials

Dwi T. Arianti, Parno Parno, Muhammad F. Marsuki, Isnani J. Fitriyah, Safwatun Nida

Biotechnology is essential to learn, but students still have difficulty learn due to a low understanding of learning materials, and students are not directly involved in learning, so that it hampers students' ability to think critically. However, the development of SETS-based teaching materials with...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Improving Reading Comprehension of Simple Reading Text Using Directed Reading Thinking Activity (DRTA) Strategy for Deaf Students

Reza A. Fauzan, Asri Wijastuti, Yuliati Yuliati

The purpose of this study was to describe the steps in using the Directed Reading Thinking Activity (DRTA) strategy to improve reading comprehension skills of simple reading texts in class VII deaf students of SMPLB Karya Mulia Surabaya. This research is a Classroom Action Research (CAR) carried out...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Exploring the Critical Thinking Process of Prospective Teachers with High Mathematics Ability in Solving Ill-Structured Problems

Abd. K. Jaelani, Siti M. Amin, Abadi Abadi

This study explored the features of critical thinking process skills of prospective teachers with high mathematics abilities in the process of solving ill-structured problems in mathematics classes of private universities in Makassar, Indonesia. Participants solved ill-structured problems by following...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Professionalism Development of High School Teachers in Improving the Ability to Implement Realistic Mathematics Education in East OKU Regency

Edwar Edwar, Ratu I. I. Puteri, Zulkardi Zulkardi

The results of the teacher competency survey from the 2018 Program for International Student Assessment (PISA) put Indonesia in rank 74 out of 79. This shows the low quality of teachers that has an impact on student achievement. The ability of students is very lacking, especially in the ability of understanding,...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Teacher Interpersonal Communication With Autism Students In Inclusive School

Faiqotul Himmah, Wiwik Widajati, Budiyanto Budiyanto

In teaching and learning activities, communication is the most important factor as the main source in conveying knowledge. The purpose of this study was to describe the interpersonal communication of autistic students with teachers. This research uses qualitative research methods with qualitative descriptive...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

# Application of Fading in Expressive Language E-Learning Autistic Children

Nur R. A. Siddieqy, Sujarwanto Sujarwanto, Wiwik Widajati

Language is a means of communication that gives symbols and meaning to thoughts and feelings to convey messages or information to others, but children with autism have difficulty in expressive language communication. This happened to children with autism in one of the special schools in the city of Sidoarjo...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

## Proceedings Article

### Implementation of Differential Reinforcement of Other Behavior (DRO) with Digital Video Assistance to Reduce Maladaptive Behavior in Deaf Children

Sibi D. Novialassafitri, Siti Masitoh, Endang Purbaningrum

This study aims to determine the effect of the Differential Reinforcement of Other Behavior (DRO) program to reduce maladaptive behavior or behaviors that should not appear in children with hearing disabilities that occur during online learning at home. The research approach uses quantitative research...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

## Proceedings Article

### A Study Accessibility of Deaf Students During The Covid-19 Pandemic (Case Study of Online and Offline Learning)

Melania Safirista, Sofiarti Murtadlo, Endang Pudjisartinah

The COVID-19 pandemic has changed various sectors including education. One of the vital things is the education sector including Deaf Education. In

this qualitative research, the researcher invited some informants to explore various things since the problem that occurs among Deaf students is also access...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### User Interface and User Experience Design of Family Intervention Application for Parents of Children with Autism

Luqyana D. Amira, Wagino Wagino, I K. Budayasa

Children with autism need optimal and consistent intervention at school and home. Parents need an application as a guide for implementing interventions at home. This study aims to develop a home-based intervention application design so that it is easy to use by parents and match with the intervention...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Development of Automated Assessment Tool to Measure Student Creativity in Computer Programming

Ricky E. Putra, Ekohariadi Ekohariadi, I K. D. Nuryana, Yeni Anistyasari

Computer programming is one of the favorite learning topics among students in the 21st century. However, the students' creative thinking skills are often less able to compensate for this computer programming learning. One of the learning activities applied to hone students' creativity in computer programming...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

## Development of Authentic Assessment Models in Research Methods Courses

Sri Wahyuni, Fertilia Ikashaum, Endah Wulantina, Juitaning Mustika, Laila Mustika Putri

Assessment is one of the learning processes used to see the success of learning. If the assessment system is correct, then the data obtained will describe the actual learning outcomes. This research aims to produce an authentic assessment model used as an assessment guide for research methods courses....

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

## Modern Art Inculturation Oriented Education in Flores

Warih Handayaningrum, Dwiki N. Mukti, Setyo Yanuartuti

An island in the East Nusa Tenggara region, Flores shows dynamics of artistic development- making it different from other islands in Indonesia. One of the influencing factors in the development of art school. In Flores, a junior secondary seminary school was established in Sikka in 1926. In the seminary,...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

## Strengthening Students' Motivation in Statistics Online Learning Through Interactive Animation Media on Android Smartphone

Ni W.D. Ayuni, Agus A. Putrawan, Kadek C. Dewi

Students' motivation plays an important role in increasing students' ability and learning outcomes, especially in online learning. Strengthening student motivation can be conducted by using proper and creative learning media. With an interesting media will make students enthusiastic in taking lessons....

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Ethnomathematics: Traveling Trade on The Musi River

Malalina Malalina, Ratu I. I. Putri, Zulkardi Zulkardi, Yusuf Hartono

The culture around students can be used to understand mathematical concepts even though there is not much linking the culture in students in the learning process. This study aims to discover the mathematical concepts in traveling trading activities on the Musi River. The research subject is a traveling...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Visually Impaired Students' Creative Thinking in Solving a Geometry Problem

Luthfiana Tarida

Every person has an equal opportunity to pursue education, with no exception for visually impaired students. Sometimes, it is difficult for them to learn mathematics, especially geometry. Geometry is usually learned by visual that visually impaired students have limitations due to damaged eyesight. Creative...



[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Islamic Financial Literacy in Mathematics Education: Proposed Design for Instruction

Intan B. Kusumawati, Achmad D. Fachrudin, Ratu I. I. Putri, Zulkardi Zulkardi,  
Soffil Widadah, Muhammad K. Mubarak

This study aims to develop a social arithmetic learning design by integrating Islamic economic principles. Using various Islamic financial products as a context in mathematical tasks, we propose a hypothetical learning trajectory (HLT) to support the students' Islamic financial literacy (IFL) skills....

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### How Pre-Service Elementary Teachers Deal with Mathematical Literacy Problems? A Case Study

Rita Novita, Tatang Herman, Didi Suryadi, Dadan Dasari, Mulia Putra

Pre-service elementary teachers (PSETs) must understand in-depth mathematical concepts and procedures. Still, they must also improve their mathematical ability and skills in solving mathematical problems and applying them in all aspects of life. Such mathematical capacity is known as mathematical literacy....

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

## Development of Student Worksheet Based on Ethnomathematics Traditional *Engklek* Games on Cube and Rectangular Pyramid

Mar'atush Sholihah, Soffil Widadah, Dewi Sukriyah

The math learning associated with traditional games will make students learn while playing, but unfortunately not many teachers have developed learning devices related to ethnomathematics. The purpose of this study is to describe the process and result of the development of student's worksheet based...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

### Proceedings Article

## Tetra-Helix Concept Model Based on Vocational Realistic Education (VRE)

Agus A. Putrawan, Ni W. D. Ayuni

Even though many studies have been conducted regarding realistic mathematical concepts, there is only a little research on their implementation in vocational mathematics learning. This study aims at producing a mathematics instructional materials development model. This study was a research and development...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

### Proceedings Article

## Pedagogical Skills Exercise as an Alternative to Increase The Teaching Ability of Pre-Service Chemistry Teachers at Field Experience Practice

Mohan T. Mashuri, Suyatno Suyatno, Utiya Azizah

This study aims to determine the effect of providing Pedagogical Skills Exercise (PSE) on the teaching ability of pre-service chemistry teachers the Field Experience Practice (FEP). The PSE used in this study consist of three different aspects, namely the skill of developing teaching materials, the...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### The Effects of Sample Size and Options Number on the Validity Item of Students' Environmental Personality Score

Rahmirini Datau, I M. Putrawan, Wardani Rahayu

Personality possesses close ties with character education or building. A student that studied character building will be able to apply pro-environmental behaviors. An instrument is needed to determine a students' environmental personality, and the most important trait in a test/instrument is validity....

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Understanding Philosophy of Mathematics Education Through Numeracy Task with the Context of Covid-19 Pandemic

Tatag Y. E. Siswono, Masriyah Masriyah, Shofan Fiangga, Ahmad W. Kohar

Philosophy as a science that studies general objects of knowledge needs to be introduced in various activities, such as solving problems related to numeracy in the context of the COVID-19 pandemic. Hence, this study aims to explore students' understanding of the general philosophy of completing numeracy...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Pre-service Science Teachers' Critical Thinking Dispositions and Critical Thinking Skills

Amiq Fikriyati, Rudiana Agustini, Suyatno Suyatno

Critical thinking disposition and critical thinking skills are essential parts of critical thinking that are mutually reinforcing. This study is aimed to describe and examine the relationship between critical thinking dispositions and critical thinking skills of pre-service science teachers. In this...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Development of Mathematical Literacy Problems Using Bengkulu Context

Agus Susanta, Hari Sumardi, Zulkardi Zulkardi

The implementation of the Minimum Competency Assessment (AKM) in 2021 created confusion among students and teachers, especially in secondary schools in Bengkulu City due to the limited number of problems that refer to the AKM. The purpose of this study was to generate mathematical literacy problems using...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Publication Performance and Scientific Impact of Unesa Postgraduate Lecturers

Wasis Wasis, Tsuroyya Tsuroyya, Muhammad A. Ghofur

The performance of scientific publications of the Postgraduate lecturers at Universitas Negeri Surabaya is one of the important indicators in measuring the quality of learning as well as the reputation of the institution. Therefore, the performance requires continuous support. This study seeks to describe...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Profile of Students' Science Process Skills on Substance Pressure Material

Saidawati Saidawati, Zainul A. I. Supardi, Fida Rachmadiarti, Eko Hariyono, Arif Sholahuddin, Binar K. Prahani

Science education essentially involves students in a systematic scientific investigation. SPS can be developed in science-based learning so that students can use it as a basic skill to master science. 100 students of class VIII of Junior High school in the first year were the samples used in this research....

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### The Relationship of Eye-foot Coordination with Football Skill: A Correlation Study in Young Football Player

Razali Razali, Myrza Akbari

Football skills are one of the fundamental aspects that football players must possess. In addition, to support football skills, football players must be equipped with abilities in good physical condition. Based on previous research studies, movement in football is dominated by dynamic movements, so that...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### The Effectiveness of Using Problem Based Learning and Video Scribe

R. A. Rica Wijayanti, Didik Hermanto, Mety Liesdiani

This study aims to describe the effectiveness of the Model Problem-Based Learning and video scribe media in terms of mathematical reasoning and motivation to learn. This study was quasi-experimental with the nonequivalent control group design. The population of this research was all students in SDN Bilaporah...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### The Use of STEM-Integrated Project-based Learning Models to Improve Learning Outcomes of Junior High School Students

Roudhoutul A. Rochim, Prabowo Prabowo, Mohammad Budiyanto, Eko Hariyono, Binar K. Prahani

The research objective to get the profile of STEM-integrated PjBL (project-based learning) models for improving learning outcomes of junior high school students. Qualitative descriptive analysis using literature review was conducted to get the profile of STEM-integrated project-based learning models....

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

## The Study of Implementation SETS Approach to Improve Students' Critical Thinking Skills

Wardatul Aini, Fida Rachmadiarti, Prabowo Prabowo, Eko Hariyono, Binar K. Prahani

Some skills need to be developed in the 21st century, namely communication, collaboration, critical thinking and problem solving, and creativity. SETS is an approach in learning activities that consists of four components, namely science, technology, environment, and society. This approach is applied...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

### Proceedings Article

## Ethnomathematics in Wedding Traditions of Dayak Ethnic

Hodiyanto Hodiyanto, Karsoni Bertadinata, Gemi Susanti, Andi M. Ramlan, Hartono Hartono, Iwit Prihatin, Utin D. Susiaty, Muhamad Firdaus, Darwanto Darwanto, Sumarno Sumarno, Agustina Marlina

The purpose of this study was to explore ethnomathematics in the Dayak Pompak'ng ethnic marriage tradition. The type of research used in this study is qualitative research with an ethnographic approach. This research was conducted on the Dayak Pompak'ng community, especially in Lintang Pelaman Village,...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

### Proceedings Article

## How Does Social Science Education Drive Marketing Mindset to Shape Entrepreneurial Interest?

Harti Harti, Nasution Nasution, Nugroho H. Purnomo, Andre D. Witjaksono, Norida C. Sakti, Ramlee b. Ismail, Mohd A. b. M. Noor

The study of entrepreneurial interest and marketing mindset were limited in entrepreneurial education and has not taken into account a broader scientific family, specifically the social sciences. Previous studies also omitted to mention the influence of external environments on the social science education...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Unpacking Primary Teachers' Initial Knowledge of Realistic Mathematics Education: A Case of Iceberg Model of Fraction Division

Evangelista L.W. Palupi, Ahmad W. Kohar, Rooselyna Ekawati, Shofan Fiangga, Masriyah Masriyah

Iceberg model of realistic mathematics education (RME) is known as a metaphor to illustrate how informal, pre-formal, and formal mathematical models and strategies are used by students to develop a "floating capacity" for the understanding of formal representations of mathematics. This is a survey study...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### STEAM-Integrated Project Based Learning Models: Alternative to Improve 21st Century Skills

Zayyinah Zayyinah, Erman Erman, Zainul A. I. Supardi, Eko Hariyono, Binar K. Prahani

Education in Curriculum 2013 has to create and design learning for the 21st century. 21st-century skills have to possess critical thinking, problem-solving, creativity, collaboration, communication, science literacy, etc. STEAM-integrated project-based learning consists of five aspects, namely science,...



[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Statistical Reasoning Ability of Banda Aceh City High School Students

Vaniyon Ariwinanda, Cut M. Zubainur, Hizir Sofyan

Statistical reasoning ability is the ability to understand the information that exists in everyday life based on statistical data, the ability to answer problems properly based on existing data in different ways, and obtain results that are not much different. The purpose of this study was to examine...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Readability of Higher-order Thinking (HOT) Mathematical Problems in Disaster Context for Junior High School Students

Fahlida Harnita, Rahmah Johar, Rina S. Oktari

Disaster mitigation efforts in learning mathematics need to be carried out to foster disaster awareness in students through higher-order thinking (HOT) mathematical problems in a disaster context. One effort that can be done is to design HOT math problems with disaster context. However, the problems...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Developing a Realistic Mathematics Education Based Learning Module on Sets Subject in Junior High School

Rinoanus E. Jenaman, Kadek A. Wibawa, I G. A. P. A. Wulandari

The 2013 curriculum emphasizes student activity in the learning process. Therefore, learning resources used are expected to support the curriculum. Learning resources used in schools are in the form of textbooks and worksheets which only contain a summary of material and assignments for students. This...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Preliminary Learning Design Based Realistic Mathematics Education on Entrepreneurship Arithmetic Content in Junior High School

Kadek A. Wibawa, I P. A. A. Payadnya, Rinoanus E. Jenaman, Dilla Safira, Gede I. Gunawan, Ni L. P. K. W. Lestari, Putu Y. Prawesti

One thing that causes boring mathematics learning is teachers often do not relate the concepts to students' experiences in their life. This research aims to develop learning designs based on realistic mathematics education on entrepreneurship arithmetic content in junior high school. In this paper,...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### World Complexity in BIPA Textbook Levels A-C as Materials for Indonesian Vocabulary Mastering for Foreign Speaker

Agusniar D. Savitri, Dianita Indrawati, Suyatno Suyatno

One of the things that foreign speakers find difficult when learning Indonesian is the form of derivation. Foreign speakers find it difficult to distinguish the use of affixed words. One of the books used as a reference in learning Indonesian is the A-C level BIPA textbook published by Badan Bahasa....

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### The Effect of Using Online Learning Media and Learning Styles Towards Marine Cadets Learning Motivation

Ardhiana Puspitacandri, Sutoyo Sutoyo

The study aims to determine the interaction of web-based learning media used and the student learning styles in influencing learning motivation during the distance learning process during the pandemic. The research population was cadets of Surabaya Merchant Marine Polytechnic in the second semester....

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Improving Parents' Attention to The Interest of High School Students Continuing Study in Higher Education through a Parenting Program

Ninin Irmawati, Najlatun Naqiyah, Hadi Warsito

Continuing to college is the dream of high school graduates living in urban areas. With good grades in semesters 1-5, they can pass SNMPTN with a study program that suits their interests, especially if they have KIP or PIP scholarship cards. With KIP they do not need to spend money, tuition fees are...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

## A Study of ICT-Based Learning in Elementary School Mathematics Learning Concepts During the COVID-19 Pandemic

Wiryanto Wiryanto, Chusnul Chotimah, Ni'matur Rochmah, Mario Florentino

This study aims to examine the application of technology to mathematics learning at the time of the Covid-19 pandemic. The research method used is comparative analysis research. The variables being compared are Information and communication technologies-based learning media with the contribution of several...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

### Proceedings Article

## High School Students' Self-Regulated Learning and Academic Procrastination Level in Blended Learning Model: A Correlation Analysis

Nanang Habibi, Retno Hariastuti, Rusijono Rusijono

The Covid-19 pandemic causes teachers to conduct limited face-to-face learning with online and offline (blended learning), impacting students' low self-regulated learning (SRL) and high academic procrastination (AP). This study aims to describe students' SRL and AP levels in the blended learning model...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

### Proceedings Article

## Implementation of Lesson Study for Learning Community (LSLC) and PMRI in Three-Dimensional Learning at A State Secondary School in South Sumatera

Rini H. Rusiyanti, Ratu I. I. Putri, Zulkardi Zulkardi

Lesson Study for Learning Community (LSLC) is one of the efforts that can be done to improve teacher learning abilities. LSLC is an activity that can solve problems faced by teachers by applying various methods or appropriate learning strategies according to the demands of the 2013 curriculum and 21st...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Designing Learning Trajectory on The Topic of Simplifying Fractions Using Realistic Mathematics Education with Flipped Classroom Strategy

Stevanus Trionanda, Hongki Julie

This study aims to design a learning trajectory-based instruction that is used to teach simplification of fractions using realistic mathematics education and flipped classroom. This study is the design research which aims to develop a learning instrument theoretically and empirically. The instruments...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Analysis of Mathematical Creative Thinking Ability of Junior High School Students on Angle Materials

Bahagia Bahagia, Rahmah Johar, Anwar Anwar

Creative thinking is an important ability in mathematics, but the studies that have analyzed students' creative thinking abilities on angle material are still limited. This study aims to determine the mathematical creative thinking ability of junior high school students on angle material. The type of...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Prospective Mathematics Teachers' Pedagogical Content Knowledge in Teaching Mathematics Using Flipped Classroom Strategy

Hongki Julie

The purposes of this study are to describe (1) how the learning trajectory of students taking Micro Teaching courses in class D for the 2020/2021 academic year is so that students can practice the Flipped Learning model, and (2) how the Pedagogical Content Knowledge (PCK) of students who take the Micro...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

### Synergy of Industrial Sector for the Implementation of MBKM Curriculum: Where Innovators and Investors Meet

Bambang Yulianto, Sujarwanto Sujarwanto, Harmanto Harmanto, Martadi Martadi, Sueb Sueb, Hasan Subekti

The Government of Indonesia promotes the idea of independent learning (MBKM) as the natural learning process to achieve student's autonomy for critical thinking, creativity, and collaborative skills. The purpose of this study is to map various forms of synergies between the higher education and industrial...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

#### Proceedings Article

## Strategies to Implement Independent Learning Programs: Reflective Study on Ministerial Programs

Harmanto Harmanto, Bambang Yulianto, Muhammad Sholeh, Hasan Subekti, Sueb Sueb

The essence of Independent Learning (MB-KM) programs proposed by the Ministry of Education and Culture is to explore the potential of university learners and students in innovating and improving the quality of learning independently beyond the main study programs. In line with MB-KM policies, higher...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

### Proceedings Article

## Rhetorical Moves Used in Thesis Proposal Writing: A Reflective Study of ELT Students

Sueb Sueb, Zainul Aminin, Fauris Zuhri, Abdur Rosyid, Lina P. Hartanti, Laily M. S. Harti

This research aims to analyze and investigate the rhetorical patterns used by undergraduate ELT students in writing the introductory section of thesis proposals. This study focuses on the rhetorical structures (rhetorical moves) used by the students, in particular how the argumentation and rhetorical...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

### Proceedings Article

## Training of Applying Research-Based Learning on Junior High School Social Studies Teacher

Nasution Nasution, Warsono Warsono, Sarmini Sarmini, Ketut Prasetyo, Nuansa B. Segara, Dian Fauziah, Tri S. Ulamatullah

The facts that social studies teachers do not yet have a research culture t focuses on improving the quality of social studies learning and slightly v learning models used during the learning process lead to the urgency of having a teacher training program on improving teachers' understanding...

[+ Article details](#)

[+ Download article \(PDF\)](#)

---

1

## Atlantis Press

Atlantis Press – now part of Springer Nature – is a professional publisher of scientific, technical & medical (STM) proceedings, journals and books. We offer world-class services, fast turnaround times and personalised communication. The proceedings and journals on our platform are Open Access and generate millions of downloads every month.

For more information, please contact us at: [contact@atlantis-press.com](mailto:contact@atlantis-press.com)

► PROCEEDINGS

► JOURNALS

► BOOKS

► POLICIES

► MANAGE COOKIES/DO NOT SELL MY  
INFO

► ABOUT

► NEWS

► CONTACT

► SEARCH

---

[Home](#) [Privacy Policy](#) [Terms of use](#)



Copyright © 2006-2023 Atlantis Press – now part of Springer Nature



