BOOK OF ABSTRACT

The 4th PROGRESSIVE AND FUN EDUCATION INTERNATIONAL CONFERENCE

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BOOK OF ABSTRACTS
The 4th Progressive and Fun Education International Conference

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Organized by

Asosiasi LPTK Perguruan Tinggi Muhammadiyah
Majelis Diktilitbang PP Muhammadiyah
Universitas Muhammadiyah Makassar
Universitas Muhammadiyah Surakarta
FOREWORD FROM THE CHAIRMAN OF ASSOCIATION OF
MUHAMMADIYAH TEACHER EDUCATION INSTITUTE
(ALPTK-PTM)

The 4th Progressive and Fun Education International Conference

Bismillahirahmanirrahim, Assalamu’alaikum wr wb

Since its inception, the identity of the MUHAMMADIYAH TEACHER EDUCATION INSTITUTE has been a dynamic focus for the ummah and works to educate the nation. This is in line with the formulation of the Muhammadiyah’s goal at its inception in 1912 by KHA Dahlan that focused on two main points. First, to spread the teachings of the Prophet Muhammad to the people in Yogyakarta residency. Second, to advance religious matters to its members. Muhammadiyah as a reformist movement is reflected through the change in the formulation of its objectives, the term is now known as a review of vision and mission or a review of the school curriculum. Exactly in 1921 or eight years after the founding of Muhammadiyah, the results of the review of the objectives were formulated to (a) promote and encourage the teaching and learning of Islam in Hindia Belanda (: Hindia Netherlands) and (b) promote and encourage the way of life along the will of Islam to all of its allies.

In the context of global developments that are more dominated by the progress and achievement of the development of communication-information-computing technology, the direction and development of educational management that can captivate the hearts of the people cannot escape the paradigm of the Muhammadiyah organization, which is progressive and encouraging. A basic formula that contains historical and futuristic values that are extraordinary.

In connection with the philosophy and history that underlie the establishment of the Muhammadiyah Organisation and especially through the educational explanation of the MUHAMMADIYAH TEACHER EDUCATION INSTITUTE, it is considered very reasonable to hold conference on an ongoing basis to explore identity, history, design and development of education in the form of The 4th Profunedu (The 4th Progressive and Fun Education International Conference). This conference forum is scheduled to take place at least once a year and is carried out in a chain on and between MUHAMMADIYAH TEACHER EDUCATION INSTITUTES throughout Indonesia.
On behalf of the ASSOCIATION OF MUHAMMADIYAH TEACHER EDUCATION INSTITUTES, we would like to express our gratitude and high appreciation to all parties who have played an active role in this conference activity, both as the main speakers and other public speakers as well as the parties who assist fully in this conference activity. Thank you to the Rector of Universitas Muhammadiyah Makassar and other civitas academics who have provided full assistance to this activity. Finally, Jazakumullah Khoiron Katsiron

Alhamdulillahirabbi'alam, Wassalamu'alaikum wr wb

Makassar, 7 August 2019
Chairman of the PTM ALPTK,

Prof. Harun Joko Prayitno
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ABSTRACT
TECHNIQUES FOR GIVING FEEDBACK IN SCIENCE LEARNING

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Abstract
The success of a learning process can be seen from the learning objectives, the achievement of learning objectives can be known through the learning outcomes of students through tests. to improve student learning outcomes are always done with exercises in completing the test. in the process educators have an active role to provide feedback on the results of the tests carried out by these students. Learning by giving back is a form of means to achieve learning goals with a return starting with conveying the objectives and keywords followed by giving material that is suitable with the learning objectives, and giving good return to what will be done in the learning process or at the end of the study and done at home. Giving technique is a way to give feedback to students to find out the understanding / mastery of science learning material towards students Science learning will be more effective when students are involved in completing training. The use of feedback techniques can improve student learning outcomes.

Keywords: Technique Giving Feedback, Science Learning

DEVELOPMENT OF LEARNING MANAGEMENT SYSTEM BASED ON LOCALHOST WITH APPROACH SYNCHRONOUS BLENDED LEARNING (CASE STUDY ON DIGITAL SIMULATION SUBJECT IN VOCATIONAL SCHOOL)

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Abstract
This study aims to (i) Develop a Learning Management System that can run on laptops as localhost servers and xampp applications as web servers that can be accessed via laptop / netbook or smart phones using wireless connections on digital simulation subjects. (ii) Examine whether a host-based Learning Management System is developed valid, practical and effectively used in Vocational Schools. (iii) Knowing whether the locally based Learning Management System developed was responded positively by students and educators. This development research uses the development method proposed
in the general education development model proposed by Tjeerd Plomp. The subjects of this study were vocational high school students XTKJ-02, and XTKJ-03 and XTKJ-04 Makassar which were determined by convenience sampling. The data obtained in this study is the validity of media data and teaching materials, data on the effectiveness of student learning outcomes through pretest and posttest, practicality data from the responses of educators and students through questionnaires. The results of this study indicate that: (i) Localhost-based Learning Management System Method developed through five phases, namely: the initial investigation phase, design phase, realization phase, test phase, evaluation, and revision, and the implementation phase. (ii) Validation of experts Regarding the localhost-based Learning Management System method in terms of media and material is very feasible; (iii) In large-scale trials, the learning outcomes of all XTKJ-03 and XTKJ-04 classics students are above 80%; (iv) Discussion of students on the method developed on a large-scale trial gave very good positive responses with a percentage of 94% for students XTKJ-03 with the number of students 34 participants and 90% for students XTKJ-04 with the number of participants student 31 participants; (v) Practicality of activities towards the methods developed for educators and students is very good with an average value of 3.77 for educators and 3.63 for students; (vi) And is responded positively by educators based on the results of a questionnaire that shows educators are interested in learning activities that use the localhost-based Learning Management System method that has been applied.

Keywords: Learning Management System, Blended Learning, Localhost, Digital Simulation.

EFFECTIVENESS OF CHILDREN'S FRIENDLY PROGRAM IN THE FORMATION OF STUDENT CHARACTERS.

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Abstract
Making character students is the task of education, the essence of which is to build whole people, namely human beings with character. Child-friendly education that is implemented in schools directly or indirectly will shape the character of students. Character education is not only a demand of laws and government regulations, but also by religion. The purpose of this study was to find out how the implementation of child-friendly programs in SMP Negeri 1 Batang Kuis and to find out whether or not effective child-friendly programs in
forming the character of students in SMP Negeri 1 Batang Kuis. Data collection techniques used in this study are documentation methods, and interviews. The method used in this study is a qualitative descriptive method, which summarizes a number of large data that is still raw into information that can be interpreted. The implementation of child-friendly programs is based on several principles, namely non-discrimination, children’s rights, the best interests of children, survival and development of children, and good development for children. The results of the study show that child-friendly programs are effective in forming student character. This is indicated by the correlation between child-friendly programs carried out in SMP Negeri 1 Batang Kuis Medan with character formation based on data obtained from respondents’ answers.

Keywords — Effectiveness, Child Friendly Program, Student Character

COMPARATIVE STUDY OF REASONING CAPABILITY AND MATHEMATICAL UNDERSTANDING OF STUDENT BETWEEN APPLICATION OF OPEN ENDED APPROACHES AND EXPOSITORY APPROACHES AND RELATION TO STUDENT EARLY CAPABILITIES

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Abstract
The problem in research is the low reasoning ability and mathematical understanding of students is the lecturer-centered learning outcomes. Change in the learning process into student-centered learning must be done, one of which is learning that applies the Open-Ended approach. This research is aimed at comparing: (1) Reasoning skills and mathematical understanding of groups between Open Ended approaches and expository learning. (2) Reasoning skills of mathematical between learning and early math ability of student mathematical learning result. (3) Mathematical understanding between learning and early math ability of student mathematical learning result. This research is quasi-experiment. The subjects of this study were students of Mathematics Education Study Program who were randomly selected by two classes. Class B was treated with 32 students by Open ended approaches and Class C was treated with 32 students by Expository Learning. The instrument used was a description test from reasoning and mathematical understanding test, observations of student activities, diversity and answer patterns given by students. Data analysis was performed by t-test and Kruskal-Wallis Non-
Parametric Test to see the mean difference and Anova of two Factorial 2 x 3 lines. The main result of this study is that students who study with the Open Ended Approach significantly have higher reasoning and mathematical comprehension skills than students who learn with the Expository Approach. Students with high abilities significantly have higher reasoning and mathematical comprehension skills than students with moderate abilities compared to low ability students, except mathematical reasoning abilities in groups of students with expository learning. There is no interaction between learning factors and students ability factors that influence students' reasoning and mathematical understanding abilities.

Keywords — Reasoning Capability, Understanding Capability, Open Ended, Expository, Early Capabilities

ANDRAGOGY-BASED LEARNING MODEL TO INCREASE FUNCTIONAL LITERACY LEARNING MOTIVATION

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Abstract
Functional literacy is a non-formal approach of education to eradicate illiteracy. Functional literacy as an ability to read, write, and count oriented on daily life by utilizing local wisdom and local resources to increase the quality and welfare of the learners. Within functional literacy learning, motivation plays a critical role to ensure positive and negative result, and influence the learning activity to maximize the learning achievement. To solve the motivation problem of the learners, functional literacy is focused on the development of learning model to provide effective solution through andragogy-based functional literacy learning model. Physically, the objective of this study was describing and finding out; (1) the objective condition that motivates learners at functional literacy of PKBM Pengayoman at the Correctional Facility, Gorontalo, (2) Conceptual model of andragogy-based functional literacy to increase functional literacy learners’ motivation, (3) implementation of andragogy-based of functional literacy learning model to increase the motivation of the learners’; and (4) effectiveness of the andragogy-based learning model to increase the learning motivation of the learners. This was a research and development study with a descriptive qualitative and quantitative approach. This study was implemented at PKBM Pengayoman of Correctional Facility, Gorontalo. The subject of this study was 10 functional literacy learners (1 group).
This study found: (1) the objective condition for learning motivation of the functional literacy learners at PKBM Pengayoman of Correctional Facility, Gorontalo showed that the implementation of functional literacy learning at the PKBM Pengayoman was based on the fact that there are people at this Correctional Facility that were illiterate, thus needs literacy program to increase their welfare; (2) development of andragogy-based functional literacy learning was designed based on the learning for adult (andragogy), and in its implementation refers to the non-formal education model, which conceptually ease the learners to carry out the learning process; (3) implementation of this functional literacy learning model was tried through the stages of: 1) planning; 2) implementation and 3) assessment/evaluation. These stages were objective and appropriate to increase learning motivation of the learners; (4) development of the andragogy-based functional literacy learning model was proven to be effective to be implemented in increasing the motivation of the functional literacy learners.

Keywords: Functional Literacy Learning, Andragogy, Learning Motivation.

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**ANALYSIS OF TEACHER UNDERSTANDING ABOUT LITERACY IN ORDER TO MAXIMIZE SCHOOL LITERACY MOVEMENT TO FORM LITERATE GENERATION**

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Abstract

This study aims to analyze the profile of teachers' understanding of the school literacy movement so that it is useful to maximize the implementation of literacy activities as an effort to form a literate generation, this article will analyze teacher understanding is complex both from the concept, principle, and implementation. this research was conducted on elementary school teachers in the district of Pekalongan, totaling 52 people. This study used a qualitative research method. Data analysis used the Miles and Huberman models steps as for steps (1) data reduction, (2) data presentation, and (3) drawing conclusions/verif. Data were collected through observation and interviews. The results showed that the average teacher had received information about the school literacy movement but had not understood the principles and importance of literacy, the average teacher understood literacy as an effort to improve formal learning outcomes not to literacy culture, so literacy was understood to not arrive at the goal of forming a long-term literate generation. So this research is important to be referenced schools and
stakeholders in preparing more comprehensive socialization that teachers better understand the essence of the importance of literacy to form teachers who are ready to implement school literacy movement to form literate generation.

Keywords— teacher’s understanding of literacy, school literacy movement, literate generation.

LITERARY LEARNING THROUGH THE DISCOVERY LEARNING MODEL TOWARD WRING FANTASY STORY ABILITY

Sakdiah Wati

Abstract
Discovery Learning Model is a strategy developed by referring the various learning approaches that are assumed to be able to improve the quality of teaching and learning. Development is expected to challenge the students to produce something creative. Something that needs to be implanted on them through this of discovery learning model, both teachers and students, will be aware of, determine information, to be dialed, and create creative literary works. This research is a quantitative realm study. The benefit of this research is to create learning by using Discovery Learning model for creative literary writing. For achieving this goal, the method used in this study was a Research and Development (RD) method of Gall and Borg (2003). The specific Target to be achieved in this research is the creation of discovery learning model for Indonesian language course students at various universities in Palembang with the following specifications: (1) Learning according to the curriculum; (2) can be done with or without lecturers; and (3) can develop creative writing skills for students. Relevant to the method used in this study, its includes: (1) observation of teaching-learning activities in the Quasi class of experimentation; (2) short story screening that become teaching material; (3) The preparation of learning models; (4) Learning model trials; (5) Evaluation of the test results; and (6) revision of the learning model.

Keywords: learning, literature, Model, Discovery Learning, writing, fantasy story.
INCREASING HIGHER ORDER THINKING SKILLS BASED ON CHARACTER AND SELF-CONCEPT OF STUDENTS THROUGH ENVIRONMENT POLLUTION PRACTICUM

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Abstract

Higher order thinking skills are the main part of an assessment after the learning process because students are able to apply the information received, seeing the relationship between what should be taught with prior knowledge, being able to use knowledge or information to create knowledge and information. This study aims to describe the improvement of higher order thinking skill based on the character and self-concept of students through practicing environmental pollution. This study was designed with the design of one group pretest-posttest design. The data obtained were derived from the results of higher order thinking skill tests, character observation results and student self-concept questionnaire results in three study programs with a sample of 120 people. Data analysis was done by N-Gain test. The findings of the study found that as many as 64 students who have very good character have an average increase in higher order thinking skills of 0.48 (48%). Students with good character are 56 people with an average increase of 0.42 (42%). Students with very high self-concept were 22 people and the average increase was 0.54 (54%). Students with a high self-concept are 85 people and have an average increase of 0.44 (44%). Students with moderate self-concept are 13 people, the average increase is 0.41 (41%). Thus it can be concluded that through environmental pollution practice there is an increase in higher order thinking skills based on the character and self-concept of students with an average of 0.455 (45.5%).

Keywords— Higher order thinking skills, character, self-concept, practicum, environmental pollution

THE ROLE OF SCOUTING IN DEVELOPING THE LOVE OF THE HOMELAND OF STUDENTS IN SMP NEGERI 1 PURWOKERTO

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Abstract
The conditions of love for the country today are truly worrying, where the young generation experiences character decadence, behaves badly, more boasts culture outside and forgets about their own country. This study aims to understand and review the role of scouting in developing the love of the homeland in students at SMP N 1 Purwokerto. This study used a qualitative approach with descriptive method. The technique of collecting data in the form of interviews with educators and students, observation and documentation. Data validation used as an extension of observation, triangulation, using reference material and holding a member check. While the technique of analyzing data used data reduction, data display verification / drawing conclusions. The results of this study indicate that scouting has an important role in developing a sense of love for the homeland, where scouting activities were packaged through activities that are interesting, fun and challenging and contain the values of the love of the homeland. Educators in delivering material used the right methods and steps for character development. Scouting was able to change the behavior of students through a long and not easy process due to the background conditions of different students. The real manifestation of the scouting is students can obey the applicable regulations, increase politeness, interact well with others, love and maintain the natural environment and increase awareness to love the country. In addition, students also practice trisatya and Darma Dasa and Pancasila in their daily activities.

Keywords: Scouting, Character, Love of the Motherland.

ASSESSMENT IMPLEMENTATION BASED ON 2013 CURRICULUM TO IMPROVE METACOGNITIVE CAPABILITY IN SCIENCE TEACHERS IN DONGGALA DISTRICT

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Abstract—This development research aims to improve the metacognitive abilities of science subject teachers through the implementation of the 2013 curriculum-based assessment in Donggala which refers to the 2013 Plomp development model which consists of several phases, namely: (1) Initial Investigation Phase, (2) Design phase, (3) Realization, (4) Test phase, evaluation and revision. The sample in the study was a science subject teacher in Donggala Regency with 30 people. Methods of data collection in research and development include: (1) Preliminary studies, (2) Making 2013 curriculum-based assessment tests and (3) Testing and improving assessment tests. The data analysis
technique used is descriptive qualitative technique with tests of validity, reliability, level of difficulty, distinguishing power and effectiveness of questioning. The results of the study can be concluded that the results of the evaluation of test instruments by material experts, design and practitioners showed very good categories with an average percentage of evaluations between 85.47% to 90.71%. The validity test results of the metacognitive tests in the study are valid by using a significant level of 5%, the reliability test results obtained an average value of 0.79 which is greater than the average rtabel so that the level of reliability is High, for the level of difficulty the problem is classified as Medium, the question differentiation test is based on the analysis of tests classified as Medium, High and Very High and the effectiveness of questioning is 76% -125% in the Very Good category and 51% -75% in the Good Category.

Keywords: Assessment, 2013 Curriculum, Metacognitive, Science teachers.

THE INFLUENCE OF VISUAL 3D MEDIA AND GRAPHICS MEDIA FOR DESIGN MACHINE MODELS

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Abstract. Quality education requires qualified and capable educators to play a professional role in school and community settings. In line with this, the teacher’s competence demands also adjust to these developments. Teachers are not only able to deliver the subject matter, but the teacher must also be able to teach children. The purpose of this study is to prove that there is a significant difference between the learning that uses three dimensional visual media with learning using graphic media during the learning process takes place. Research method used in this research is experiment, because researcher try to see difference or influence happened to research subject. The learning process will be effective if supported by adequate means used to facilitate the learning process in school. With the supporting facilities in learning can lead to interaction between teachers with learners where there is mutual in the learning process. One of the means referred to as learning support is learning media. By using appropriate and appropriate media can improve learners’ learning outcomes. Media can attract the attention of learners in learning, even can make it easier for learners to understand the material delivered.

Keywords: Visual, Media, Graphics, Machines, Model
DEVELOPING INQUIRY-BASED STUDENTS WORKSHEET ON SOIL FOR THE FIFTH GRADERS OF ELEMENTARY SCHOOL IN EDUCATION UNIT OF LUMBIR

Pamujo and Anifah Lutfiani

Abstract
This Student’s Worksheet was developed through research and development method and then piloted. The aims of this research were: 1) to produce inquiry-based student’s worksheet on soil for the fifth graders of elementary school in education unit of Lumbir; 2) to know the teachers’ and students’ response towards the learning using the student’s worksheet; 3) to reveal the effect of the student’s work sheet implementation towards the learning achievement of science. The procedure of development in this research referred to 4-D model invented by Thiagarajan, Semeland Semel. The student’s worksheet was piloted in a limited as well as wide scope. The subjects were the fifth graders in 8 elementary schools in education unit of Lumbir for the experiment and control group. Based on the validation result, two validators gave valid category with average score of 3.66. The revised version of the worksheet then was piloted in a limited scope with the result of the teachers’ responses 4.68 (very satisfying) and the students’ responses in answer a and b with the average percentage of 70%. The student’s worksheet had been revised referring to the suggestion and inputs from teachers in the limited scope and then was piloted in the wider scope. Based on the pilot of the worksheet in the wider scope, the teachers’ response obtained 4.48 (strongly agree) and the students’ responses in answering a and b obtained the percentage more than 70%. The homogeneity test was done in advance before the test of hypothesis in each class. The manual hypothesis test showed that 5 pairs of experiment class resulted the U result ≤ U table which meant Ho was rejected. Based on the result of hypothesis using SPSS, it was known: 1) SDN1 Lumbir, U result ≤ Significance = 0.007 ≤ 0.05 meaning Ho was rejected; 2) SDN1 Parungkamal, U result ≤ Significance = 0.0085 ≤ 0.05 meaning Ho was rejected; 3) SDN 5 and 2 Lumbir, U result ≤ Significance = 0.003 ≤ 0.05 meaning Ho was rejected; 4) SDN 6 and 3 Lumbir U result ≤ Significance= 0.003 ≤ 0.05 meaning Ho was rejected; 5) SDN 1 and 2 Kedunggede U result ≤ Significance= 0.0045 ≤ 0.05 meaning Ho was rejected. All the results indicated that there was an effect of the implementation of inquiry-based student’s worksheet on soil towards the learning achievement of science. Based on the result of the research, the inquiry-based student’s work sheet on soil for the fifth graders of elementary school could be used in the learning process.

Keywords: Student’s worksheet, Inquiry, and 4-D Development model.
IMPLEMENTATION OF THE SUSTAINABLE PROFESSION DEVELOPMENT PROGRAM ONLINE BASED ON IMPROVING PEDAGOGIC COMPETENCE AND PROFESSIONAL EARLY SCHOOL LEARNER TEACHERS

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Abstract:
This research aims to explain the application of sustainable professional development program based online to improving the competence of pedagogic and professionals teacher of early grade in elementary school. The research draft is conducted in quantitative and qualitative form of 30 early-grade elementary school teachers in South Sulawesi. The collected data methods are used for online media validation and test performance. Collected Data is analyzed with descriptive statistics. The results showed the validation of online-based Learning applications = 3.5 (very valid). The test shows a good category with an average percentage of 42.5% on four online-based learning activities that (a) get to know the online features, (b) write down the learning features, (c) write the name of the activity based online, and (d) Describe the utilization of features in each learning activity. Furthermore, the achievement of the pedagogic and professional competence indicators in the learners through an online-based ongoing professional development program is a high category. Therefore, teacher of early grade elementary school have the ability to compose a learning program plan and implement the learning process well in class after join a professional online-based sustainable development program.

Keywords: sustainable profession development, online, pedagogic, professional

RHYTHMIC GYMNASTIC DEVELOPMENT AS MEDIA TO INCREASE BASIC MOTION IN ELEMENTARY SCHOOL STUDENT

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Abstract
This study was held to create rhythmic gymnastics which effective and resulting a significant gymnastic in order to upsurge basic motion and its interest on rhythmic gymnastics. In this study, there are several steps to develop this gymnastic development. They were introduction, planning, basic draft design, basic draft validation and its revision, experiment in small scale, experiment in
big scale, last product, and the last was effectivity of test. This study was held in three different elementary school. To test the small scale was held in SDN Pirikan and for the big scale test was held in two school they were in SDN Kalinegoro 3 and SDN Soroyudan. To collect the data for the research there were several instruments was used namely interview references, material and learning expert questionnaire, questionnaire for teacher and student, and rubric for test effectivity valuation. The data analysis technique which was used for this study was using both quantitative and qualitative descriptive. The result was formed as rhythmic gymnastics for elementary students’ upper class (grade 4, 5, 6) which was wrapped in DVD and there was a guide book model which was considered as good and effective guide for the elementary student. By this result, learning mode was developed properly to be utilized.

Keywords: learning model, rhythmic gymnastics, elementary school student, basic motion.

LITERACY MOVEMENT READ AL-QURAN THROUGH HABITS OF READING FIFTEEN MINUTES EVERY DAY

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Abstract:
The content of multicultural education in curricula in Elementary School or Madrasah Ibtidaiyah is an integral part of strengthening character education, one of which is religious attitudes which are part of the superiority of religiously labeled Madrasah Ibtidaiyah. One of the excellent programs offered is facilitating graduates to read and memorize short letters in juz 30 Al Quran. This paper will talk about the implementation of the Al Quran Literacy Movement as a flagship program in a private Madrasah Ibtidaiyah. The located in Kembaran District, Banyumas Regency in increasing students’ reading interest through a fifteen minute reading habit every day before the lesson begins. Literature study is a method used to describe the importance of the Al-Quran Literacy Movement to improve religious attitudes and establish habituation to students who must to do continue it every day in class before learning begins. This habit is expected to form gradually and in the future can be entrenched.

Keywords: Literacy Movement read Al Quran, Religious Attitude
ANALYSIS OF STUDENTS’ DIFFICULTIES IN SOLVING TRIGONOMETRY PROBLEMS

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Abstract
Trigonometry is one of the basic concepts of mathematics learned at school and in college. Problem solving ability is one of the soft skills that students must have. Most of the students still have difficulty in solving problem. This study aimed to describe the difficulties of students in solving problems, especially in solving trigonometry questions to improve teaching methods for the future classes. The subjects of this study were first-semester-mathematics-education study program students who had already taken trigonometry courses. Seven students volunteer to answer trigonometry questions in this study. The research type was qualitative descriptive research. Data collection tools were essay trigonometry tests, deep interviews with the students and documentation. Data analysis techniques were carried out using document analysis techniques. The results showed that the students had difficulty in understanding the information given to solve the problems. They did many errors in applying trigonometric concepts to answer the questions, because they did not calculate correctly the results of angle comparison. Besides, they incorrectly determined the angle of comparison between the angles obtained. Furthermore, the students were not accustomed to solve trigonometry questions given, because they were confused. In the end, they ran out of time to solve the problem given.

Keywords— Difficulty Analysis, Trigonometry, Mathematics Education Students, Problem Solving

ENHANCEMENT SELF EFFICACY WITH COUNSELING SERVICES TECHNICAL SELF MANAGEMENT TO CONVICTED CRIMINAL IN JAIL CLASS II B LABUHAN DELI 2018

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Abstract
Prisoners have considered themselves to be a group that is considered dangerous and who consider themselves to have a large disability and are
considered low in society. Therefore, there needs to be an effort to improve the prisoners' self-efficacy to improve their motivation in interacting and interacting with other normal communities when they join later in society by using relevant methods namely self management with indicators of development at the stage of self-monitoring or self-observation, self-evaluation and then self-improvement. The phenomenon of rejection of the presence of prisoners has sounded very common. This has a major impact on the survival of prisoners after being released from prison sentences.

This study aims to improve the self efficacy of individual ex-prisoners in the Labuhan Deli Class IIB Detention Center using the services of Guidance and Counseling self management techniques. The subject of this study amounted to 85 people, namely inmates in the Labuhan Deli Class IIB Detention Center with a detention period of 6 months down to be free. Self management techniques are forming and changing desired behavior through three stages. The results of the study show that self management techniques are effective in increasing prisoners’ self-efficacy to interact with the general public.

This research was conducted to explain the quantitative relation between service of counseling technique of Self Management with Self efficasy of convict. The results of the research conclude that the state of Self efficasy of convict community members is at a low level due to the strong rejection from the community towards the convict community. The results and conclusion to answer the positive hypothesis is (rcount> rtable), so, thus (0.915> 0.304) The analysis process of SPSS from the questionnaire of the research respondents is 40 prisoners sample of 0.915 which means 91.5% with sig. 0,000 the magnitude of the influence of the application of self-management technique counseling to prisoners’ self-efficacy.

Keyword : Counseling Self Management, Self Efficasy

THE DEVELOPMENT OF STUDENT’S ADAPTIVE REASONING ABILITY AND SELF CONCEPT THROUGH ACCELERATED LEARNING CYCLE PROCESS

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Abstract
Reasoning ability is one of mathematics fundamental skill which must be mastered in 21st Century. One of reasoning ability’s aspect is adaptive reasoning. Beside that, there’s an importance for student to master self concept as well. Truth be told, student’s adaptive reasoning ability and self concept still in low level. To be remembered, the importance of those two component, there’s
a need to start learning model to develop those components. This research aims to analyze the influence of Accelerated Learning Cycle (ALC) towards students ability on mathematical adaptive reasoning and students’ self concept. The design used in this research is post-test only control design in which the the researcher involved all 8th grade students in one of public junior high school in Banyumas Regency as the population. In addition, cluster random sampling technique was used to get the samples. The results was, there were two classes used in the research. One class as the control class, where the students followed a direct teaching and learning and the other class as the experiment class where the students experienced Accelerated Learning Cycle (ALC). The result of this research shows that the student’s mathematics adaptive reasoning ability who experienced Accelerated Learning Cycle (ALC) learning proved to be better than student’s mathematics adaptive learning ability from the student whose experiencing direct learning. This also appeared in self concept in term of the student whose experiencing Accelerated Learning Cycle (ALC) proved to be better than the other class which did not experienced it. In other words, Accelerated Learning Cycle (ALC) could develop student’s mathematics adaptive reasoning ability and self concept.

Keywords— Accelerated Learning Cycle (ALC), self-concept, mathematics adaptive reasoning ability.

ACCOUNTING LEARNING WITH LESSON STUDY ACTIVITIES IN FKIP UMSU

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ABSTRACT
This study aims to analyze the learning of Accounting with Lesson Study Activities. This research is motivated by the difficulty of students in studying accounting, which results in low student learning outcomes. Based on the observations made there are still many students who lack focus in learning, this results in learning outcomes being low. The object of this research is accounting students in Semester II FKIP UMSU. This research is a descriptive study, the number of samples is 34 people. The implementation of the Lesson Study is carried out through three stages, namely Plan, Do and See. The procedure of the study was carried out by applying the lesson study steps. The first stage was conducting a lesson plan with fellow lecturers who were in charge of cognate courses and then carried out an Action class in the class while carrying out observations assisted by several observers and finally carried out a reflection on the implementation of the learning. The research instrument was in the form of
an observation sheet. The data analysis technique is a descriptive analysis technique. The findings of this study are still low student learning activities, so the learning outcomes obtained are still in the moderate category with an average calculated value of 71.

Keywords: Learning Activities, Lesson Study

EXPERIMENTAL ANALYSIS OF ADOBE FLASH CS6 BASED INSTRUCTIONAL MEDIA DEVELOPMENT IN ACCOUNTING SUBJECT IN VOCATIONAL MIDDLE SCHOOL
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Abstract: The purpose of this study is to compare the achievement of students’ activeness and learning outcomes in the teaching-learning process using Adobe Flash CS6 interactive media-based multimedia compared to conventional learning in Accounting with the material on journal adjustment for Vocational Middle School students. The research method used was the quasi-experiment method with the pretest-posttest control group design. The population of this research is first year vocational middle school students. Data sampling was conducted using the purposive sampling technique for the experiment class and the controller class. The data collecting technique used was observation, test, and documentation. The analysis technique used to test the result of this research was the independent sample t-test.

The result of this research showed that there is a difference in the activeness of the students’ learning in the learning process using the Adobe Flash CS6 interactive media-based multimedia compared to conventional learning. The result of the t-test with the significance level of 5% showed a significant difference of 12.889 ≥ 1.994 between the experiment class and the controller class. The average rate of students’ activeness from the result of the observation instrument was 51.42 for the experiment class and a lower result for the controlled class with 40.30. Furthermore, it is also proven that there is a difference in the learning outcome of learning using the Adobe Flash CS6 interactive media based multimedia compared to conventional learning. From the result of the t-test, there was a significant difference of 14.254 ≥ 1.994. The average rate of students’ learning outcome of the experiment class was 89.72, whereas the controlled room was 71.25. The gain score of the experiment class was within the high category while the controlled class was within the moderate category.
Keywords: instructional media, Adobe Flash CS6, students’ learning activeness, students’ learning outcome.

PREPARING FOR QUALITY EFL TEACHERS: THE DISJUNCTURE BETWEEN POLICIES AND PRACTICE IN THE INTERNET COMMUNICATION TECHNOLOGY (ICT) USE IN CLASSROOM CONTEXT

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Abstract
Globalization has resulted in great consequences on mobility, competition and employability. It certainly implies high expectation and demands on quality and graduate standards for employability. Pre service teacher institutions need to reform several aspects to meet the demand of this globalised world. One significant aspect of reform in EFL and more broadly is the role of technology and how globalisation presents new challenges and tasks for teachers because technology has changed the tradition of English teaching significantly. In addition, various technological alternatives have the potential to make teaching more interesting, to widen students’ knowledge about the culture of English, to create more conducive environments and to improve teaching efficiency (Patel, 2013; Pun, 2013). Many recent studies suggest that producing quality graduates of EFL Teacher Education is challenging. Also, global agencies and policies have documented the insufficient competence of graduates of English Teacher Education institutions even though some recommendations for developing quality EFL teachers have been promoted. This paper aims at disseminating the result of a Carspecken critical ethnography study focusing on the issues and inconsistency between policy and practice on the implementation of ICT in the classroom which constitutes some challenges in preparing globally competitive EFL teacher graduates in Central Java, Indonesia. Globalization theory by Appadurai is applied to explain the presence of the disjunctions between policies and practices. Following Appadurai (1996) this study argues a strong degree of disjuncture between education policies and practice in terms of ICT use. What is desired in the global, national and local institutional policies are not always implemented optimally in classroom. Policy makers need to consider this mismatch as a concern in producing quality EFL teachers. The presence of the issues on the pedagogical dimension indicates the lack of awareness of the global message by local institutions. Therefore, this paper provides meaningful insights towards the discussion of the formation of quality EFL teachers not only locally and nationally but also in the broader context of teacher preparation globally.
Keywords: disjuncture, critical ethnography, globalisation, classroom context

MIND MAPPING: LEARNING STRATEGY FOR NOVICE LEARNERS OF ANATOMY FOR PHYSICAL EDUCATION UNDERGRADUATE PROGRAM

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Abstract
There is an important demand for faculty in undergraduate program to deliver lecture through student-centered learning environment. The aim of this study is to determine the effects of a mind mapping learning strategy on novice learner’s basic knowledge of anatomy. The subject of this study were new entrants of physical education undergraduate program of Universitas Muhammadiyah Surakarta. A paper-based mind-map learning strategy was introduced to the students in the experimental group to improve their basic knowledge of anatomy. This study used the experimental method with control group design. Through one-way ANOVA analysis, it was found that paper-based mind-map learning strategy had no significant contribution enhancing basic understanding of anatomy in the experimental group. In addition, the results of simple paired t-test analysis indicated that mind-map performed as similar to standard note taking technique as an effective method to facilitate students learning new subject.

Keywords—mind map, student-centered learning, critical thinking, creativity

DOMINANT PHYSICAL FACTOR DETERMINANT TO PLAY FOOTBALL

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Abstract
There is an important physical condition for football’s athlete. It determine the athlete performance on field. This research goal is to identify the dominant physical factor determinant to play football. The sampling technique used was purposive sampling. The subjects of this research were 125 football players in two university in Surakarta City. This
research use confirmatory factor analysis. Statistical software (SPSS 22) were used to process the data using Kaiser Meyer Olkin and Bartlett’s Test. The result of this study indicated that agility (0.784), foot-eye coordination (0.720), speed (0.697), dynamic balance (0.646), endurance (0.588), leg power (0.528) have a dominant factor on player skill (component factor ≥ 0.5). However, leg strength (0.380), trunk flexibility (0.410) and reaction time (0.417) has no significant contribution on player skill (component factor < 0.5).

Playing football required physical condition to maintain a competitive play in football. Coaches and athletes should consider this findings as a foundation to create a training program.

Keywords— Physical Condition, Football, Sport Training Introduction

THE CONTROVERSY OF "NUR MUHAMMAD" CONCEPT IN MALAY MANUSCRIPTS: TAJALLIY AND FAIDHUN'S PERSPECTIVE STUDY

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Abstract

The issue of the concept of "Nur Muhammad" in the general perspective still cannot resolve the nature of beings and life. This research is intended to explore the controversy surrounding the concept of "Nur Muhammad", focusing particularly on the manuscript Hikayat Nur Muhammad but also considering other Malay manuscripts to explore how "Nur Muhammad" was understood. In the context of Islamic philosophy, the concept of tajalliy (emanation) holds that everything in the universe, including human beings, originate from the "Nur Muhammad", the Almighty, viewed as the source of all light. Disagreement over the process through which the universe and its contents were created, including human beings, has created conflict between the Ahlu Wachdatil-Wujūd (Syaikh Hamzah Fansuri, Syaikh Syamsuddin As-Samatrani, and their followers) and the Ahlu Wachdatisy-Syuhūd (Syaikh Nuruddin Ar-Raniry and his followers).

This research has found that the Ahlu Wachdatil-Wujūd have held that the process through which "Nur Muhammad" spread from ta`ayyun tsāniy (second reality) or a’yān tsābitah (fixed reality) to a’yān khārijyyah (reality outside Dzāt, Wujūd, and His essence) was not a process of creation, but rather one of radiance or tajalliy. Meanwhile, the Ahlu Wachdatil-Syuhūd held that "Nur Muhammad" was not a radiance or tajalliy of light, but the bestowing of full power or faidhun, such that the light remained strong even as the beings granted power became increasingly distant.
ANTHROPOMETRIC FACTORS DETERMINANTS OF PENCAK SILAT TANDING CATEGORY

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Abstract—The purpose of this study was to determine the anthropometric factors that determine the skills of the tanding category of pencak silat. This study uses a correlational method, with a confirmatory factor analysis design that confirms the relationship of indicator variables with latent variables that determine the skills of pencak silat. The collected data is then verified and tabulated to be processed quantitatively by: (a) Analysis of multivariate statistical factors using Statistical Product and Service Solutions (SPSS) computerized software so that it can be reduced to a number of factors. (b) Calculate the value of the average contribution of each factor in the latent variable and the dependent variable. (c) Describe the value and position of the average score of the dominant variable in importance-performance matrix transformation.

The results of this study are as follows: (1) The anthropometric factor that determines the skills of pencak silat in the match category is height with a percentage of roles to a factor of 79%, and the length of legs with a percentage of roles to a factor of 76%.

The conclusions in this study are as follows: (1) Anthropometric factors (latent variables ξ1) that determine the skills of pencak silat match categories can be measured by variable height indicators (X1) with a value of 0.86, and leg length (X2) with a value of 0.83.

Keywords—Physical Condition, Football, Sport Training Introduction
DOMINANT PHYSICAL PREDICTORS OF APNEA CAPABILITIES IN SCUBA DIVING

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Abstract
The purpose of this study was to find out: between the variables of leg length, chest circumference, leg muscle strength, lung capacity, maximal oxygen volume and flexibility of torso, which one predominantly affects the ability of apnea in diving. This study included "correlation" which consisted of independent variables namely leg length, chest circumference, leg muscle strength, lung capacity, maximal oxygen volume, and torso flexibility, and the dependent variable was the ability of apnea in diving. The sample used in this study was male diving athletes in Jogjakarta Province of 25 people. Data is obtained from the tests of each independent variable and includes the dependent variable, then analyzed using a computer instrument program with SPSS and Amos.

The approach taken in this study is a quantitative approach, using the Confirmatory Factor Analysis design (Emzir, 2008: 48). Factor analysis is a multivariate statistical method that tries to explain the relationship between a number of changes that are mutually independent of one another so that one or more sets of changes can be made less than the number of initial changes. Factor analysis is used to determine the dominant factors in explaining a problem.

The multivariate statistic method is widely used. One multivariate was used in the sports field to measure anthropometric and physical dominant variables in diving apnea abilities where the variables (six independent variables and one dependent variable) that had been collected would be processed and analyzed using the Computerized Statistical Program with the SPSS system (Statistical Product and Service Solutions ) Version 22 and using AMOS 18. Multivariate statistics require a lot of mathematical calculations that are not possible to do manually. With many other multivariate methods such as confirmatory factor analysis, where the level of complexity can exceed multiple regression methods, SPSS, and AMOS are calculated.

Keywords: diving apnea, scuba diving, factor analysis, anthropometry.
EXPLORING SCHOOL PREPAREDNESS TO DEVELOP SAFE SCHOOL IN DISASTER-PRONE AREAS

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Abstract
Schools become one of the public facilities that are vulnerable to disasters. Damage school facilities can cause the future of the young generation to be threatened. Schools in disaster-prone areas must have preparedness in coping disasters so children will be safe and comfortable while in school. This research is a qualitative-quantitative study, with principals and teachers as respondents. Data collection techniques using questionnaires, interviews, and documentation. The variables used to measure school preparedness are policies, emergency response plans, disaster warnings, and resource mobilization. The results of the study indicate that the preparedness of schools to realize safe schools has an unprepared index, with a value of 50.8. Aspects that need to be improved to develop safe schools include the presence of emergency response plans, disaster warnings, and resource mobilization. Schools still very limited in providing disaster warning systems and disaster training. Delay in disaster information can encourage more disaster victims. Schools in disaster-prone areas must prepare policies, infrastructure, and suprastructure so they can create disaster safe schools and be able to encourage a resilient generation of disasters.

Keywords—safe school, preparedness, disaster area.

THE EFFECTIVENESS OF THE USE OF LEARNING STRATEGIES IN DELIVERING THE MATERIALS OF DISASTER GUIDE BOOK IN SENIOR HIGH SCHOOLS AND VOCATIONAL HIGH SCHOOLS

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Abstract
Disaster is a natural thing in Indonesia. High vulnerability to it must be balanced with extensive knowledge of disaster, particularly, that of students. They are subjects who are vulnerable to disasters. Disaster education has been implemented in the learning system by the use of disaster learning guide
book in Klaten Regency. This research was conducted to determine the effectiveness of disaster learning guide book in encouraging the students' disaster preparedness. Quasi experimental design was employed in this research. The form of the design used was Nonequivalent Control Group Design. The respondents of this study were students of three senior high schools and those of two vocational high schools. The data analysis techniques used were pre-test and post-test. The results indicate that the use of learning strategies to deliver the materials of disaster guide book in Klaten Regency had various levels of effectiveness. The use of several active learning strategies always shows better results than the conventional learning/lecture. Active learning strategies can be used to deliver disaster materials in both senior high schools and vocational high schools on the grounds that the students had a deeper understanding of disasters.

Keywords—effectiveness, disaster preparedness, disaster guide book, learning strategies

THE LINKAGES TO THE NATURE OF SCIENCE, CRITICAL AND CREATIVE THINKING IN JOYFUL LEARNING

Subuh Anggoro

Abstract— The nature of science is not fully understood by students, teachers and preservice teachers. Though understanding of the nature of practice of learning in the classroom. Though the knowledge of the nature of science affects learning they provide in classroom practice. Critical thinking about the development of human knowledge. Creative thinking is a major component of higher order thinking. Joyful Learning has been widely applied in various countries. The purpose of this activity is to implement a learning plan that develops creative and creative thinking skills using Joyful Learning Strategy. While the benefits of this activity are to help teachers improve creative learning, with innovative learning methods. The mixed methods used and the participants were 223 preservice teachers (41 males and 182 females). The questionnaire of NOS were validated were used. Data analysis used descriptive with percentage. The results showed through learning plans that have been implemented can develop students’ critical and creative thinking skills. Furthermore, the researcher gives some suggestions that is, (1) Joyful Learning with integrated learning will be able to generate critical and creative thinking abilities when the teacher understands the nature of science properly; (2) The learning environment of the classroom and school facilities and non-physical
interaction between teachers and students become important factors of Joyful Learning success.

Keywords— the nature of science, critical and creative thinking, joyful learning

APPLYING THE TWENTY FIRST CENTURY SKILLS (4C SKILLS) IN PRESENT CLASSROOM INSTRUCTIONS

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Abstract
The teacher’s skill in developing good and successful classroom learning has been high attention for the government for years. The attention has been implemented by issuing several government decrees to make standardized classroom learning to get the maximum achievement. The government decrees which cover good classroom learning are, among others, PP No 44 2015 on SNPT, Permendikbud No 022 2016 on Standar Proses Pembelajaran, PP No 55 2017 on Standar Pendidikan Guru. However, the quality of the teachers’ classroom learning implementation is still far from the government expectations. By using the four twenty first century skills (creativity, critical thinking, communication, and collaboration) as the main indicators, most teachers still lack the skills. As for communication skills, to implement good communication most teachers still have to develop their communication skills perceived from time, place, and kinds of activity. For collaboration skills, they still need to develop the skills based on the time and also strategy. Dealing with creativity skills, more teachers still find it difficult to create activities which accelerate students’ creativity. The case is similar to critical thinking. They mostly find it hard to design activities which provoke students’ critical thinking. All these problems are quite pressing to solve in order for them to have better understanding and skills to run successful classes implementing the twenty first century skills. To answer this, teachers should have good understanding and skills implementing classroom learning based on the scientific approach.

Key words: creativity, critical thinking, collaboration, communication
SCIENCE LITERATION IN PROSPECTIVE ELEMENTARY SCHOOL TEACHERS THROUGH SCIENCE TECHNOLOGY LITERACY LEARNING

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Abstract
The PISA report on science literacy skills in 2015 shows the position of Indonesian students in the 61st rank of 69 participating countries. Even though it has increased from its previous achievements in 2012, but Indonesian students are still lagging behind other students, especially in Southeast Asia. In catching up with this lag, the teacher has an important role to train students’ literacy skills, therefore a prospective teacher must be able to literate science. This study aims to examine the application of STL (Science Technology Literacy) learning to science literacy skills of prospective elementary school teachers. The research method used was pre-experiment with the design of the one group pretest-posttest design. Research subjects were 33 prospective elementary school teachers in Sukabumi City. The calculation results from pre test and test post scores obtained N gain value of 0.43, after the statistical test using the t test results, it is obtained that Ho is rejected (asymp. Sig p-value = 0.00 <0.05) means that there is a significant effect of the application of STL learning towards science literacy skills of prospective elementary school teachers. Student attitudes obtained in indicator 1) support science inquiry (80.18%, good category) 2) responsible for natural resources and environment (77.02%, good category), and 3) indicators of interest in science (62.88%, good enough category). The conclusion of this study shows that practicing scientific literacy is suggested to start from elementary school teachers with learning methods / models / strategies based on science, technology, and literacy.

Keywords— Science Literacy, Science Technology Literacy

THE FAMILIARITY OF PRE-SERVICE BIOLOGY TEACHERS WITH ICT IN LEARNING

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Abstract
The study focuses on the intensity of the pre-service Biology students and their descriptions on how they use software for completing their learning assignment.
This study also wants to describe the familiarity of respondents of some software that supports learning and teaching in the Microteaching course. All 71 respondents are undergraduate students, 88.7% are female, and 11.3% are male, between 18–23 years old. The students should do assignments given at the beginning of the semester to perform teaching simulation (microteaching). Through these activities, the students will get experience by themselves to prepare their performance in microteaching, such as arranging a lesson plan, developing learning media, and making a suitable presentation for their class. Therefore, the data collected is qualified to be analysed using statistical software. This study found that pre-service Biology teacher students have a high preference for the use of Android-based smartphones, Whatsapp, and internet mobile connectivity for fulfilling their course assignments.

Keywords: ICT in education, pre-service biology teacher, LMS, technology in learning

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**IMPROVING SCHOOL LITERACY THROUGH READING FRIDAY PROGRAM**

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Abstract
This study aims to describe Reading Friday program and its contribution in improving school literacy. Data collection uses observation, interview, and documentation techniques. The object of this research is Reading Friday program in Tasikmadu Junior High School in Karanganyar, Central Java. Data analysis is performed using an interactive model, during collection and after completion of data collection. The results of the study indicate that Reading Friday is a program carried out to increase the literacy of students, which was held on third Friday of each month, can be either in class or outdoor, overseen and assessed by teachers through reading notes in assignment books. Reading Friday program contributes in improving school literacy through four ways: (1) increasing students' reading interest and empowering library, (2) increasing students' productivity in school creative writings/art (3) increasing students' seriousness in learning and their test scores (4) helping students understand school subjects easier.

Keywords: Reading Friday, school literacy, reading motivation
COLLABORATIVE LEARNING TRAINING THROUGH CSCL APPROACH
(COMPUTER SUPPORTED COLLABORATIVE LEARNING)

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Abstrak
This paper is made with the intention of knowing the effectiveness of collaborative learning that is applied using the CSCL method in learning. This is done to find out how much the contribution of computer use in collaborative learning. The main focus is how subject teachers utilize computer learning media in implementing collaborative learning. Learning with this method is expected to be able to improve the quality of learning carried out by the teacher and provide great motivation for students because it utilizes learning media to the maximum because before the teacher still used traditional methods of learning that made learning motivation low.
The objectives in detail in this study are 1) to know how to develop a collaborative learning model through CSCL (Computer Supported Collaborative Learning) approach to subject teachers; 2) knowing how to design collaborative learning models through the CSCL approach; 3) Knowing how the results of developing collaborative learning through the CSCL approach have met the criteria of valid, practical, effective, and efficient. Planned research is educational research and development (educational research and development). Computer supported collaborative learning (CSCL) learning model is part of the learning function with a student-centered learning model. The CSCL learning model is a combination of cooperative learning models and the use of computers and the internet as a medium for learning. With increasingly sophisticated technology, individuals in remote locations make it possible to collaborate online.

Keywords: Collaborative learning supported by computers, collaborative learning training.
Abstract
Avoidance behavior and fear were often felt when the students felt anxiety and they also experienced when speaking in public. Ideally students in the lecture process are expected to develop their potential, but in reality anxiety when speaking in public hampered their potential. The thought that other people didn’t like it when talking, feeling a very fast heartbeat, and emitting a lot of sweat was an aspect of feeling afraid of something that has not happened, thus affecting the individual’s mind to take a position. This study aimed to examine the effectiveness of information services that combine lecture, sociodrama, and discussion methods to overcome student learning anxiety. This research used quantitative methods. This type of research is Quasi Experiment with the design of The Non Equivalent Control Group. The population of this research was Muhammadiyah 1 Medan High School students, and the sample was selected using Purposive Sampling techniques. The research instrument used was the Likert Scale model, the data were analyzed using the Wilcoxon Signed Ranks Test and Kolmogorov-Smirnov Two Independent Sampels with the help of SPSS version 20. The findings of this study were: (1) there were significant differences in students’ learning anxiety in the experimental group before and after participating in information services that combine lecture, sociodrama, and discussion methods, (2) there were differences in students’ control anxiety before and after participating in information services using lecture, question and answer, and discussion methods, (3) there were differences in student learning anxiety between the experimental group students who were given information services that combine lecture methods, sociodramas, and discussions with control groups provided information services using lecture methods, question and answer, and discussion. Differences were seen from the average score of the experimental group posttest higher than the control group. Based on the findings above, it could be concluded that information services that combined lecture methods, sociodrama and effective discussion overcome the student learning anxiety.

Keywords—Information service, Lecture Methods, Sociodrama, Effective Discussion

COUNSELING GUIDANCE MODULE TO PREVENT STUDENTS’S HEDONISM LIFESTYLE ATTITUDE

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Abstract
This study aims to formulate the feasibility of the counseling guidance module to prevent student’s hedonism lifestyle attitude and also the use of counseling by counseling teachers / counselors in senior high school. This research method uses the ADDIE model. The subject of the research trial consisted of three experts to test the feasibility, and three counseling teachers / counselors. The instrument used was the Likert Scala, questionnaire and Focus Group Discussion (FGD). Data from the research results were analyzed using descriptive analysis and nonparametric statistical analysis. The research findings show that the Guidance and counseling module can be used by counselors to assist teachers in preventing the students’ hedonism lifestyle attitude.

Keywords — Hedonism Lifestyle Attitude, Counseling Guidance Module

EFFECT OF TEACHER TRAINING AND LEVEL OF EDUCATION ON THE QUALITY OF LEARNING

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Abstract
Private school teachers’ lack of enthusiasm to attend and participate in professional development trainings has motivated the study to investigate whether teacher training and education has positive impact on learning quality improvement. This study aims at describing the effect of teacher training and education on learning quality. It is designed as a quantitative study carried out in a private senior high school with questionnaire as research instrument. Data analysis was performed with statistical instruments. The present study found the low participation of private school teachers in attending professional development training and teacher education. In fact, some teachers have never joined such trainings. The finding also reveals teacher training and education have a positive impact on improving the quality of learning activities. Nevertheless, this study is limited on a small population since it was carried out only in one private school.

Keyword: teacher training, level of education, quality of learning
COMBINATORIAL THINKING LEVELS IN SOLVING MATHEMATICAL PROBLEMS

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Abstract
Combinatorial thinking is an essential thinking process of knowledge and experience building. The research aimed at describing the characteristics of combinatorial thinking level in solving mathematical problems. The subjects amounted to 40 undergraduate mathematic education students in the 2nd and 6th semester of Universitas Muhammadiyah Surakarta. All of them were asked to solve mathematical problems. Due to meeting all the levels of combinatorial thinking, five out of 40 students (subjects) were interviewed and tested. The data validation employed a method triangulation. To make sure the validity and reliability, the results of the interview were compared with the paper-based test results. The findings show that five levels of combinatorial thinking in solving mathematical problems: 1) identifying some alternative cases, 2) checking all cases systematically, 3) applying counting principles, 4) generalizing solutions systematically, and 5) changing the problem to another combinatorial problem. By using the five levels of combinatorial thinking, the students have understood a lot of concepts for solving a mathematical problem and could solve various problems.

Keywords: knowledge and experience building, characteristics, combinatorial thinking levels, solving mathematical problems, undergraduate students

TEACHING MATERIALS IN ELT FOR EMPLOYMENT: WHAT ARE APPROPRIATE?

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Abstract
INQF or the Indonesian National Qualification Framework has been implemented since 2016 by tertiary institutions in Indonesia as a reformed education policy. This study examines whether the framework has satisfied the ELT graduates’ needs for employment in terms of teaching materials which focuses on oral communication. The study participants were ELT graduates with variety of jobs. Using interview technique, the findings revealed that some
materials written in the INQF do not match the graduates’ needs at work. They need materials containing English for Specific Purposes or ESP to support their jobs other than as English teachers such as translators, bank clerks, front officers for not all ELT graduates are not interested to be English teachers. Thus, the gap between the needs for what to teach for future employment in ELT and the INQF items on materials should be fulfilled to improve ELT outcome-based education.

Key words: INQF, KKNI, ELT Materials for Employment, Employment in ELT, English for Specific Purposes

THE DEVELOPMENT OF ECOLOGICAL CHARACTER WITH “ADIWIYATA” ECO-SCHOOL PROGRAM: ELABORATING ON INCLUSIVE SCHOOL ENVIRONMENT

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Abstract
This research explores the character development of environmental care through the eco-school (Adiwiyata) program that is run in inclusive schools. The program is a policy of the department of education and environment to provide literacy about environmental management to students. This study used a qualitative approach with the CIPP (context, input, process, and procedure) evaluation model and semi-structured interview, observation, and documentation as data collection method in a vocational high school in Probolinggo. Research informants involved included students, teachers, and principals. Informants from the group of students were divided into groups of children with special needs and regular students according to the characteristics of the inclusive school. The results of the study illustrate the effectiveness of the Adiwiyata Program seen in the empowerment of personnel resources, curriculum, facilities and infrastructure, and quality control to build independent eco-green. This program succeeded in disseminating motivation and environmental care to both students with special needs and regular students as a capital for sustainable development. This was also driven by the role of Adiwiyata Program which was integrated into the school curriculum especially to strengthen extracurricular activities. This study contributes to the expansion of theoretical discourse and the practice of character development in environmental care by considering the needs and privileges of students.

Keywords—eco-school, adiwiyata, environmental care, inclusive school
DIFFERENCE OF ACCOUNTING LEARNING RESULTS USING MODEL CREATIVE PROBLEM SOLVING LEARNING AND MODELLING THE WAY AT STUDENTS FACULTY OF TEACHER TRAINING AND EDUCATION

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Abstract
The purpose of this study was to find out whether there were differences in accounting learning outcomes using the learning model of Creative Problem Solving and Modeling The Way on the subject matter of Finished Product at students of the 4th semester 2018/2019. The problem in this study is that the low learning outcomes possessed can be seen through the quiz values performed at the end of the material. The population in this research is 41 people consisting of 40 female and 1 male from the 4th semester. The sampling technique used is the Total Sampling technique so that the sample used is all students in he 4th semester A1. The instrument used is a written test which 5 valid items. The data analysis technique used is descriptive analysis technique. Before carrying out the analysis, first test the analysis requirements which consist of determining the average value and standard deviation, normality test, homogeneity test and hypothesis test. The results of this study are CPS post-test obtained an average of 72.83 and standard deviation 12.22. Whereas for the MTW post-test data obtained an average value of 73.67 and standard deviation of 17.56. This study uses the Liliefors test to determine the normality of learning outcomes data. It can be concluded that there are differences in accounting learning outcomes using the learning model Creative Problem Solving and Modeling the Way.

Keywords—Model Creative Problem Solving Learning, Modelling the Way, Learning Outcome

ACHIEVEMENTS MOTIVATION ANALYSIS OF ELEMENTARY SCHOOL STUDENT IN PHYSICAL EDUCATION LEARNING IN GERUNGGANG SUBDISTRICT

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Abstract: The background of this study is to find the learning outcomes in physical education learning that is under students expectations and interests in following the learning process. There were 75% of elementary schools learning outcomes in the Gerunggang sub-district did not meet the minimum criteria score. The purpose of this study is to get an overview of student achievement motivation in physical education learning in elementary schools of Gerunggang Subdistrict. This study is descriptive research. The sample of this study were 40 people obtained by using the simple random sampling technique. The data obtained from the research instrument were a rating scale model questionnaire with 1-5 range of values to measure the student achievement motivation score. Furthermore, the data were analyzed using descriptive analysis techniques. The results showed that the average score of students' achievement motivation in physical education learning was 22.5% (Very High category), 62.5% (high category) and 15% (moderate category).

Keywords: achievement motivation, physical education learning

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**REORIENTATION ADAB BASED CITIZENSHIP LEARNING TO BUILD A PATRIOTIC PROPHETIC SOUL OF CITIZENS**

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Abstract
This paper offers the idea of the need to strengthen the patriotic prophetic spirit instilled in citizens in the context of actualizing Pancasila values in adab based citizenship learning. Through the strengthening of patriotic prophetic souls, there will be born a soul that dares to get used to being right, not to lose hope and be able to knit together on the foundation of the central values of the Pancasila. This soul will not be easy to accuse anti-Pancasila people simply because of their different choices, basing themselves on the values of the religion they believe in and are outside the circle of power. All will be seen proportionally using patriotic prophetic examples displayed by the leaders of the nation and state. Reorientation of the learning of citizenship both as a curricular program in school, academic studies in universities, as well as civil society-based social activities, is seen as able to build a patriotic prophetic spirit of citizens.

Keywords— Islam, akhlak, civic education, Pancasila values
ANALYSIS OF TREE STRATUM VEGETATION IN SAND DUNE CORE ZONE IN PARANGTRITIS VILLAGE KRETEK SUB-DISTRICT BANTUL REGENCY YOGYAKARTA AS LEARNING MATERIALS FOR BIODIVERSITY FOR GRADE X SENIOR HIGH SCHOOL

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Abstract
The research aims to know the species of tree stratum in the Sand Dune Core Zones of Parangtritis and their significant roles according to the Importance Value Index (IV). Besides, it is to examine the influence of abiotic environment (soil temperature, air temperature, light intensity, humidity, and soil pH) on the tree diversity in the sand dunes as well as the potential of the research results to be the learning materials for biology subject, particularly biodiversity, for Senior High School.

The samples were taken using the Point Centered Quarter (PCQ) method in the Sand Dunes Core Zones that is spread through 141 Ha. The area was divided into three, 14 Ha for each. The vegetation parameter covers density, dominance, frequency, Importance Value Index, and Diversity Index. The influence of the abiotic environment was revealed using linear regression analysis. The results were then analyzed for the potentials to be used as the learning materials in biology subjects for grade x Senior High School.

The study found six species of tree vegetation. The tree having the highest Importance Value Index is Acasia auriculiformis (124.17%), while the lowest is Psidium guajava (3.26%). The measured abiotic environments do not influence the index of vegetation diversity in the sand dunes. The results are potential to use as learning materials for grade X senior high school. The aspects include object availability and the issues in question; suitability with the learning objectives; aims and purposes; information clarity; exploration guidelines; and the outcome.

Keywords—Tree Stratum Vegetation, Sand Dunes Core Zone, Learning Source
ELEMENTARY SCHOOLER’S ABILITY TO RECOGNIZE AND RESPOND IN HYPOTHETICAL ABUSIVE SITUATIONS: A STUDY IN SURAKARTA, INDONESIA

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Abstract
The purpose of the present study was to investigate the level of knowledge and skill to prevent CSA in elementary schoolers in Surakarta City, Central Java, Indonesia. Three hundred and one 5th graders are asked as participants. All participants were enrolled in ten private Islamic (Muhammadiyah) elementary schools in Surakarta City. The sampling method used was purposive method sampling. The gender of participants had no significant effect on the results except in the “Appropriate” item. Results of the WIST revealed that about 80% for boys and 56% for girls could accurately (good and very good level) identify the hypothetical situations related to appropriate requests (touch, see, hold, take a picture). Meanwhile, about 95% of the children, both boys and girls could severely identify the hypothetical situations related to inappropriate requests. Boy’s scores on the WIST appropriate are higher than girl’s. This study shows that elementary schoolers of Surakarta have a lack of self-protection skills. Cultural and Islamic based basic prevention programs and learning resource for elementary schoolers should be developed in Surakarta and Indonesian society generally.

Keywords – sex education, self-protection, sexual abuse, children

GROUP GUIDANCE AS AN ALTERNATIVE TO IMPROVE STUDENTS ’CRITICAL THINKING ABILITY

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Abstract
Pemahaman permasalahan yakni seorang yang telah memahami adanya ketidaksesuaian antara harapan dengan kenyataan, ada yang melihat sebagai tidak terpenuhinya kebutuhan seseorang dan adapula yang mengartikannya sebagai suatu hal yang tidak mengenakan. Hal ini dalam kehidupan sehari – hari tak jauh dari permasalahan yang muncul baik dari pribadi, sosial, belajar
dan karir. Sehingga pemahaman permasalahan harus dimiliki oleh siswa agar nantinya siswa mampu memahami masalah yang terjadi maupun mencegah agar tidak terulang masalah yang sama kepada dirinya dan mampu menghadapi masalah dengan mampu mendapatkan solusi atau keputusan dengan secara baik. Bimbingan kelompok sebagai salah satu alternative untuk meningkatkan kemampuan berpikir kritis.

Keywords—Group Guidance, Critical Thingking Ability

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ENGRAFTING CHARACTER-BUILDING EDUCATION THROUGH EXTRA-CURRICULAR ACTIVITIES FOR KINDERGARTEN STUDENTS IN TK AISIYAH BUSTHANUL ATHFAL (ABA) BANJARMASIN

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Abstract
Character-building education is related to character components that contain behavioral values to develop in stages at an early age until higher education. The connection between knowledge of behavioral values with attitudes or emotions. To implement them, it must start at an early age. The government has already developed curriculum, especially in kindergarten. Somehow, extra-curricular activities are needed to help the students of TK Aisiyah Bustanul Athfal (Aisiyah Bustanul Athfal Kindergarten) to engratf character education. Therefore, the aim of this study is to explain in-depth about the extra-curricular activities in TK ABA, Banjarmasin and the effects of each extra-curricular to the students' character building in those kindergartens. The method of this study was qualitative with phenomenology approach. Collecting data was using deep interviews with the headmaster, the parents and the teachers in three kindergartens of TK ABA in Banjarmasin. Inductive content analysis was used to break down the data in small units, to code and name the units according to the content and to group the coded material based on the same concepts. The results of this study indicated that various extra-curricular activities carried out, such as dance, drum bands, Tahfidz Al-Quran and so on can engratf positive character in TK ABA students such as love of Al Qur'an, honest, discipline, independence, communicative, helping others, responsible, confident, cooperation and courageous.

Keywords — Character-Building Education, Extra-Curricular Activities, Kindergarten, TK ABA
EDUCATIONAL STATISTICS TEXTBOOKS TO DEVELOP COLLABORATIVE
SKILLS AND CRITICAL THINKING

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Abstract
Educational statistics textbook based cooperative learning is expected to facilitate teachers in delivering educational statistics lessons. This study aims to identify the characterization of the textbook based on the students characteristics. The first step of this study was analyzing the students and materials characterization. The next step was defining the characterization of the textbook based on students and materials characterization. The textbook was developing based on the characteristics. Data collected by the interviewing the students and observing the learning process. The characteristics of the textbook are (1) interactive, (2) show the contextual problem on education (3) facilitate to developing collaborative skill and critical thinking, and (4) task from the easy to hard task.

Keywords — textbook, educational statistics, collaborative skills, creative thinking

THE EFFORTS TO IMPROVE THE ABILITY TO SOLVE MATHEMATICAL
PROBLEMS WITH IMPLEMENTING CONTEXTUAL APPROACHES IN SMP NEGERI 7 YOGYAKARTA ACADEMIC YEAR OF 2018/2019

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Abstract
This research is done because students mathematical problem solving skills are still low. The purpose of this research is to improve the math solving ability of students of VII-F SMP Negeri 7 Yogyakarta in mathematics learning using contextual approach. The problem solving capabilities include 4 aspects/indicators, namely the ability to understand the problem, the ability to plan problem solving, the ability to solve problems, as well as the ability to inspect and write conclusions obtained

Class action Research is implemented in 2 cycles. First cycle consists of 2 meetings and second cycle consists of 3 meetings. In each cycle, students are given a test of mathematical problem solving skills. The instruments used in
collecting data in this study are the students' observation sheets, problem solving skills tests, and interview guidelines. Data analysis techniques are conducted with the analysis of students' observation sheets, analysis of interviews and observation of learning, and triangulation. The results showed that mathematical learning using contextual approaches could improve mathematical problem-solving skills. It is indicated by the increase in the percentage of each aspect of the cycle I to cycle II as follows: (a) the ability to understand the problem increased from 47.27% to 92.58% (b) planning a problem solving from 43.75% to 85.94% (c) resolved the issue from 50.00% to 93.36%, as well as the ability to inspect and write conclusions obtained from 42.19% to 87.50%.

Keywords: The Ability of Problems Solving, Contextual Approaches

A REVIEW OF ASSESSING MATHEMATICAL PROVING ABILITY
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Abstract
Mathematical proof is a deductive argument logically composed to show the truth of a statement. The study of mathematical proofs is separated between construct a mathematical proof and comprehending a given proof. This article is aimed to discuss the notion of mathematical proving ability which is combined from two ability: construction and comprehension of proofs. The assessment of this ability is derived from assessing both construction and comprehension.

Keywords—Assessment, proofs, proving ability, mathematics, proof construction, proof comprehension

INCREASING PUBLIC AWARENESS ABOUT THE IMPORTANCE OF MEDICAL INFORMATION CARDS THROUGH AUDIOVISUAL MEDIA
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Abstract
A medical information card is a patient’s identity card in a health service which contains patient medical record number. The function of this card is to search medical record documents belonging to patients who have been treated in the health service. As a supporting tool, medical information card brought by patients are expected to facilitate filling officers to find patient medical record documents so the services can be effective and efficient. One of the inhibiting factors the use of medical information card is the lack of appeals from registration staff to patients to always carry medical cards. This condition complicates filling officers to retrieve medical record documents according to medical record numbers and the identity of patients who register. For this reason, it is necessary to conduct socialization as an effort to increase public awareness to treat and bring medical cards so there is continuity of patient health information, which one through the use of an audiovisual media, namely video. Videos are displayed in simple animations with a short duration containing a message about the importance of caring and carrying a medical information card when seeking treatment. Through socialization in the videos, it is expected that people will be easier to receive and understand the message conveyed so public awareness about the importance of medical cards will increase.

Keywords—Medical Information Card, Socialization, Awareness.

LEARNING NATURAL FREQUENCY AND RESONANCE USING WASTED WATER BOTTLE

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Abstract
Water bottle can be used as learning media to teach physics. Finding its natural frequency and develop procedure to show resonance phenomena are needed to use it in teaching and learning in the class. In this research three bottle had been used. Using sound analysis free and tone generator installed in mobile phone we can detect the natural frequency of these 3 bottles and show the resonance phenomenon. “Fresh tea” bottle has natural frequency in 186.3±0.6 Hz. While Syrup bottle has natural frequency in 133.8±0.6 Hz and “Pristine” bottle has natural frequency in 203.4±1.2 Hz. The step to perform resonance phenomenon as follows: a). Open tone generator and click sweep generator, b). Change sweep to tone by click sweep button on bottom left, c). Change the frequency by clicking the frequency in Hz and input the frequency, d). Play by
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clicking bottom middle button, e). Move mobile phone speaker to the top of bottle mouth, f). Check the difference of sound volume at the top of the bottle and in other position

Keywords—natural frequency, resonance, Water bottle

COMPARATIVE STUDY OF INDONESIAN LANGUAGE SKILL BETWEEN PGSD AND PJKR STUDENTS AT STKIP MUHAMMADIYAH BANGKA BELITUNG

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Abstract-The purpose of this research is to describe the Indonesian language skill at STKIP Muhammadiyah Bangka Belitung students. In particular, the purpose of this research to compare Indonesian language skills between PGSD and PJKR students at STKIP Muhammadiyah Bangka Belitung based on the results of the Indonesian Language Skill Test (UKBI) with 3 aspects of assessment (listening, responding to rules, and reading). This research uses descriptive quantitative research methods. The data obtained from the UKBI results in April 2019 were 40 students consisting of 20 PGSD students and 20 PJKR students. Based on the average UKBI assessment between PGSD and PJKR students in terms of listening, responding to rules, and reading sections, PGSD students have a higher level of Indonesian language proficiency than PJKR students with an average of each section, listening to 525>508, responding to the 589>565 rules, and reading 568>559. However, if viewed from the UKBI predicate, Indonesian language skill in the listening section of PGSD students won the Excellent predicate while the PJKR with the title of Madya. In the section responding to rules and reading the two programs study have the same predicate, namely Excellent.

Keywords: Indonesian language skill, listening, responding to rules, reading, UKBI
DEVELOPING LEARNING MODEL OF LIFE SKILLS-BASED COURSES IN UNIVERSITY

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Abstract
This study aims to arrange the course learning model with the life skills perspective in every learning process at Higher Education. Thus, graduates are expected to have qualified life skills value and benefit value in which learning model starts from syllabus, Lecture Quality Plans (called RMP) and learning model implementation applied in Teaching-Learning Stage for Genre-Based Approach.

The method used was research and development. Data were collected through observation, in-depth interviews, document studies, and policy studies. Data validity was maintained by conducting the triangulation of sources, methods, investigators, and theories, while data analysis in sequential periods used SWOT analysis, interactive analysis, and implementation analysis.

The results revealed that 1) The results of the field test and feasibility test of the syllabus in the Teacher Training and Education Faculty of Universitas Muhammadiyah Surakarta (called FKIP UMS) showed that all courses could include life skills in which not all life skills should be included in learning, then, at the level of learning process implementation and evaluation, it could focus not only on developing academic skill or vocational skill (hard skill) but also on aspect of developing life skill components which could be fully included. Implementation of Special Skill Learning Outcome (called CP-KK) of the courses could use various learning methods and assignment forms, and also life skill content could be developed in a complex manner. 2) The results of field tests and feasibility tests on RMP on the courses indicated that the use of learning methods including learning approaches, strategies, and techniques could use various approaches. Many approaches are based on academic competence, vocational competence, and also on cross-curriculum competency (social and personal competencies). Stages to provide opportunities for students to gain learning experiences could be achieved through individual, paired and group activities consisting of four stages, including (1) Building knowledge of field, (2) Modelling, (3) Joint construction and (4) Independent construction. Therefore, the learning model used was an active learning model that emphasizes student-oriented and is multi-model for each stage that is based on the character of the subject matter and expected competencies. 3) Implementation of stages could show the existence of stages specifically, sustainably, and consistently to simultaneously develop the four components of life skills (social, personal, vocational and academic competencies). The learning model can be implicitly mentioned in the syllabus and RMP, for example, problem based learning, cooperative learning, collaborative learning, project based learning, contextual
instruction, small group discussion, simulation, discovery learning, or directed learning.

Keynotes: Learning, learning experience, life skills.

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THE REINFORCEMENT OF COLLABORATIVE CONSTRUCTIVE-BASED TEACHER PROFESSIONALISM IN WRITING SCIENTIFIC WORK

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Abstract
The objectives of research were: 1) to map teachers’ ability of writing scientific work, 2) to explain the form of teachers’ need in developing sustainable profession in scientific work writing field, and 3) to describe the collaborative constructive-based sustainable teacher profession development model to improve the scientific work writing. The research design employed was research and development one. Techniques of collecting data used were observation, in-depth interview, documentation, FGD, and questionnaire. Data analysis was conducted using qualitative and quantitative analyses.

The result of research showed that firstly, teachers of SMA/MA/SMK (Senior High School) Muhammadiyah in Sukoharjo having educator certificate have not understood completely the appropriate concept of scientific work writing leading to the inadequate publication of scientific work. Teachers’ experiences with writing scientific work were largely acquired when they attended Teacher Profession Training and Education. Secondly, there were many constraints in developing sustainable teacher profession. Therefore, teachers require the policy’s stakeholders to simplify anything related to the incriminating administrative activity of learning, fund support, initiative of primary and secondary education chamber, access to internet network, and support from education practitioners from high education. Thirdly, a comprehensive and integrated collaborative constructivist-based sustainable teacher profession development model could improve teachers’ productivity in writing scientific work. The development started with the teachers’ need for writing scientific work and conducted constrictively and collaboratively, while external team gave reinforcement and facilitation.

Keywords— professionalism model, professionalism development, and scientific work
ANALYSIS OF UPPER PRIMARY STUDENTS’ CRITICAL READING SKILLS IN SURAKARTA BASED ON SCHOOL ACCREDITATION

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Abstract:
This study aims to describe the critical reading skills of upper primary students in elementary schools of Surakarta City. The researchers also analyzed the differences in critical reading skills of upper primary students from A-accredited and B-accredited elementary schools. This type of research is descriptive qualitative research. Informants in the study come from 4 A-accredited elementary schools and 4 B-accredited elementary schools consisting of 2 fourth grade students, 2 fifth grade students and 2 sixth grade students per school (6 students per school). Critical reading ability was measured by using a written test instrument followed by in-depth interviews to explore six aspects of critical reading skills, namely: accuracy, clarity, precision, depth, relevance and logic. Competency analysis of students refers to Bahasa Indonesia Basic Competencies for primary students of Indonesian Ministry of Education and Culture Number 37 of 2018. The result of the study shows that the students in A-accredited schools have better critical reading skills in the aspects of accuracy, clarity and relevance. Students in sixth grade master the aspects of critical reading more than the students in fourth grade and fifth grade.

Keywords—critical reading skills, upper primary students, school accreditation, students performance

ARGUMENTATIVE SPEAK ABILITY IN ORAL ASSESSMENT FOR STUDENTS IN INDONESIAN LANGUAGE EDUCATION STUDY PROGRAM AT MUHAMMADIYAH UNIVERSITY OF PURWOKERTO 2010

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Abstract:
The phenomenon that occurs among PBSI college student is that there are many students who are not skilled at speaking argumentatively. There are four abilities that must be done by someone so that the conversation's him
argumentative, namely the ability to make opinions, compose evidence, reason, and be convincing. The problem that then arises in relation to the ability of students to speak argumentatively is how is the ability of students in (1) making of opinions ?, (2) compiling evidence ?, (3) doing reasoning ?, and (4) convincing? on the oral assessment. This research uses a qualitative approach. The instrument used to determine argumentative speaking ability is the observation sheet. Observations were carried out by three lecturers namely researchers and two other lecturers. The situation chosen is an oral assessment situation because it is more formal and natural. Data analysis was done by evaluative descriptive techniques and mixing analysis. The results of the study showed that in general the argumentative speaking abilities of college students on oral assessment were quite good with a value of 6.05. This value is obtained from the average value of the ability to make opinions 6.52, the value of the ability to compile evidence 5.76, the value of reasoning ability 6.15, and the value of convincing abilities 5.78. Based on the results of this study, it is recommended that the learning program should better emphasize argumentative communicative aspects with improvements in all aspects of argumentative speaking.

Keywords: speaking, argumentative, and oral assessment

THE NATURE OF TRUTH: INVESTIGATION OF LOGIC AND BELIEF

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Abstract
Truth is very closely related to beliefs and facts. Belief depends not only on logic but also supporting empirical facts. The truth of Sunnatullah (the truth of natural law) is the source of the science truth which always develops. The truth of this science is pragmatic and temporary which means that the prior truth that remains to be believed can be rejected by the current truth through strong arguments. These truth theories continuously attempt to find out the truth of science. The truth of Dinullah which is truth of the religion of Allah (Islam) leads to the discovery of the nature of truth. This truth only applies to humans as spiritual beings; hence, a truth in the form of “Al-Haq” from God can be believed and rejected by humans.

Keywords: truth, science, religion, beliefs, facts, sunnatullah, dinullah.
STRENGTHENING CHARACTER EDUCATION THROUGH OUTBOUND LEARNING ON ELEMENTARY SCHOOL STUDENTS

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Abstract
This electronic document is a “live” template and already defines the components of your paper [title, text, heads, etc.] in its style sheet. *CRITICAL: Do Not Use Symbols, Special Characters, Footnotes, or Math in Paper Title or Abstract. (Abstract) The objective of this research was to identify the character education building through outbound learning at Muhammadiyah Alam Surya Mentari Elementary School in Surakarta. The method used in this research was descriptive qualitative. The data were collected through observation, interview, and documentation. Observation was carried out in learning process. Interview was conducted by questioning the teachers and the headmaster. Documentation was obtained by collecting various supporting documents. This research took place at Muhammadiyah Alam Surya Mentari Elementary School (SD) in Surakarta. Triangulation methods, namely triangulation of sources and techniques, were used to validate the data. The results of this research show that: (1) characters education building is integrated in outbound learning; (2) there are five core values of character that can be developed through outbound learning, those are: religiosity, nationalism, cooperation, integrity, and self-dependence.

Keywords—characteristic education, elementary school, outbound learning

THE MODEL OF EXEMPLARY STUDENT SELECTION USING THE METHOD OF ELECTRE (ELIMINATION AND CHOICE TRANSLATION REALITY)

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Abstract
In education sector, giving awards to students is very necessary aiming to increase student motivation. Giving awards to students is certainly assessed not only in terms of student learning outcomes, but also from other activities, which students do while studying at school. Therefore, it is necessary to develop the advantages possessed by each student so that their potential can be
converted into superior achievements. As educational institutions, one of the activities schools do to develop the potential of students is through the selection of exemplary students. Decision support systems (DSS) play an important role in supporting a decision. With the large number of students, the schools usually have difficulty in determining exemplary students because they have to assess in terms of each student’s academic and non-academic abilities. This study made a model design in the form of a decision support system by applying the ELECTRE (Elimination and Choice Translation Reality) method to select exemplary students in a school, so that this model could be considered by the school in making decisions. Components of the criteria used are the average report card grades, rankings, attendances, morals, achievements, organizations, attitudes, and violation points. This criterion was taken from one of the schools that conducted the selection of exemplary students. Based on the results of the testing of the model built, it can be seen that the ELECTRE method is capable of selecting and ranking the results of the assessment components of the students’ criteria used.

Keywords: Decision Support System, ELECTRE Method, Exemplary Student.

IMPLEMENTATION OF MIND MAPPING LEARNING MODEL WITH PICTURE MEDIA FOR THE THEME OF THE BEAUTY OF TOGETHERNESS GRADE IV MADRASAH IBTIDAIYAH AL-FITRAH OESAPA, KUPANG

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Abstract
Mind mapping is one of the learning models that learns the concept or technique of remembering things with the help of mind mapping (learning techniques using mind maps, recording learning material as outlined in diagrams containing interconnected symbols, codes, pictures and colors) so that the two parts of the human brain can be used optimally. Picture is one of the media that is used to convey messages visually. The objectives of this study are to find out: (1) development of student learning outcomes; affective domain, (2) activities by teachers and students, (3) teacher skills in managing learning, and (4) the students’ responses to the mind mapping learning model with picture media. The samples involved in this study were 28 students from grade IV of Madrasah Ibtidaiyah Al-Fitrah. Data collection technique was done using (1) pretest and posttest, (2) observation sheet of teacher and student activities, (3) observation sheet of teacher skills, and (4) response sheet of students. Meanwhile, data
analysis used quantitative descriptive techniques. The results of this study show that: (1) Individual completeness scores increased from 19 students completed in the first cycle to 22 students completed in cycle II, and 25 students completed in cycle III. The percentage of classical completeness also showed an increase from 67% in cycle I, 78% in cycle II, and 89% in cycle III. There was also an increase in students’ attitude in the application of mind mapping learning model assisted with picture media as the learning processes in class IV starting from the first to the third cycle. The attitude enhancement consists of the aspects of honesty, discipline, responsibility (co-operative), caring, polite, friendly, mutual cooperation, cooperation, peace of mind, and responsiveness and proactivity in participating in learning. (2) The activities by teachers and students showed an increase to match the percentage of ideal time. (3) Teacher skills showed an increase seen from the acquisition in which a score of 2.55 in the first cycle with a moderate category, a score of 3.1 in the second cycle with a good category, and 3.46 in the third cycle with a good category. (4) The response of students to the mind mapping learning model assisted with picture media can be classified to be good, 92 percent of samples thought that mind mapping learning model assisted with picture media could improve students’ understanding of the theme of the beauty of togetherness, sub-theme of cultural diversity in my country.

Keywords: Implementation, Mind Mapping, Picture Media, Affective Study Result.

THE TEACHERS’ CHALLENGES IN APPLYING INFORMATION AND COMMUNICATION TECHNOLOGY AS ENGLISH TEACHING MEDIA

Sudiran

Abstract:
This study aims to: 1) describe the factors that support the success of implementing Internet information technology in schools, and 2) describe the challenges of teachers in using the Internet as teaching media in schools. This research was conducted using qualitative methods that use observation and interviews. The use of these two instruments is intended to obtain information about the application of Internet technology in the teaching and learning process in the classroom, and the challenges faced by teachers in implementing the Internet as a medium of learning in schools. This research was conducted at Muhammadiyah Senior High Schools 3 and Muhammadiyah Vocational School 1 in Batu, East Java.
The results of the study show that there are three factors in the success of implementing Internet information technology in schools. In applying Internet information technology, teachers have challenges in using the internet as a medium of education in schools. These challenges can be classified into two categories, namely 1) technical difficulties and 2) non-technical difficulties.

Keywords: challenges, teachers, information and communication technology, learning media, English.

**INDONESIAN ENGLISH TEACHERS CLASSROOM ASSESSMENT METHOD**

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Abstract
The aim of this study was to find out the Indonesian English Teachers Classroom assessment method in helping their students to monitor their own learning, enhancing teaching and improve learning and measuring the level of students’ achievement
To meet the goal of the study, survey design was adopted to gather descriptive and comparative data. Electronic survey questionnaire using e-surv free survey tool was built to get the data set. 200 secondary and high school EFL teachers in central, west and east Java were sent e-questionnaire and 58 were returned. The study found that the assessment method that is most often used for once a month is an assessment portfolio with 50.94%. The most used method for once a week is a filling gap test, and the method that is used most often for daily is short answer with 49.06%. In addition, the majority of Indonesian English Teacher used self assessment in helping their students to monitor their own learning. Moreover, performance assessment was the most highly used assessment in enhancing teaching and improve learning. Finally, multiple choice and essay test was the most common used of assessment method to measure the students learning outcome

Key Words : Classroom Assessment, Method, EFL Class
KNOWLEDGE EXPLORATION STUDY OF MUHAMMADIYAH SCHOOL STUDENTS ABOUT URBAN HEAT ISLAND THREATS IN SURAKARTA CITY

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Abstract
This study aims to determine the knowledge of school students on the threat of Urban Heat Island (UHI) in Surakarta City. This study uses a quantitative descriptive approach with survey methods and image interpretation. This study aims to determine the threat of UHI in Surakarta through image interpretation and to find out the knowledge about UHI, the causes of UHI, and the impact of UHI in daily life by students in schools. The study sample were SeventhGrade students of Surakarta Muhammadiyah 1 Junior High School located in the center of Surakarta City and Seventh Grade students of Surakarta 10 Muhammadiyah Junior High School located on the outskirts of Surakarta. The results showed that Surakarta City was identified to be threatened by UHI phenomena from the interpretation of Landsat 7 ETM + images where the NDVI (Normalize Difference Vegetation Index) from 2003 to 2015 accounted to -0.4491 and the LST (Land Surface Temperature) index showed an increase in high temperature of 34-35 ° C in Surakarta City in 2015. Validation test on instruments shows the value of rcount >0.444, meanwhile the Cronbach’s Alpha value is 0.635 > 0.444. Finally, the questionnaire can be declared to be reliable to use. Based on interviews with students thruvalidated instruments, it can be concluded as follow: 81.5% of students did not know that UHI was threatened the city, 59% of students felt that there was an increase in heat in the Surakarta city area at the time at night lately, 53% of students know that the temperature of Surakarta City is currently hotter than the districts around the City, 57.4% of students know the causes of urban temperature changes lately, 30.6% of students know the impact caused by the UHI phenomenon.

Keyword: Urban Heat Island, NDVI, LST, Student
MORPHOLOGICAL AND ANATOMICAL CHARACTERISTIC KINSHIP OF FALOAK PLANTS (STERCULIA QUADRIFIDA R.BR) AS LEARNING SOURCE FOR MORPHOLOGY AND ANATOMY OF PLANTS BASED ON LOCAL NATURAL RESOURCES

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Abstract
This study aims to determine the morphological and anatomical characteristic kinship of faloak plants (Sterculia quadrifida R.Br) growing in Kupang Regency as learning source for morphology and anatomy of plants based on local natural resources. The study was conducted at the Laboratory of Biology Education Study Program, Universitas Muhammadiyah Kupang in March-May 2019. This study used a qualitative descriptive approach with cluster analysis method. To see the kinship of plants, this study used UPGMA method of Nei and Li's coefficient similarity through the MVSP software program version 3.2. The results of this study show that faloacic kinship from the three locations in Kupang Regency had a value of 95.2% and 94%. Meanwhile, anatomical characteristics show that the highest stomata density value was 5.8 stomata/μm and the lowest stomata density value was 4.4 stomata/μm.

Keywords: Faloak, Morphology and Anatomy, Learning Source

THE ANALYSIS OF EVALUATION MODEL – SCIENCE SUPERVISION

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Abstract
The Science Learning Evaluation-Supervision Model was developed with Research and Development (R & D) methods. The initial stage of R & D is the analysis phase. The results of the analysis in this phase are: (1) Self-assessment data is relatively higher than the assessment data by others. (2) evaluation of competencies in school principals, science teachers and school supervisors was obtained data: teachers were nervous at the time of supervision, the workload of principals was numerous and varied, after supervising the school principal had not maximized feedback. Need to increase teacher knowledge related to teaching materials, student management skills, and personal mastery of students. School supervisors are still less related: the ability to provide guidance
to teachers, and teacher learning activities. Teachers rarely do lab work in the laboratory. (3) The results of the above research are corroborated by the feedback theory of 360 degree, the strength of lesson study, the 5 (five) domains of science, the purpose of supervision, and the demands of active learning in science learning, which is necessary to revitalize science learning supervision. Revitalization supervision is done through evaluation, both in planning, implementation process and after supervision. The suggestion of this researcher is the need to do research in the next stage, namely in the define phase.

Key Word: Analysis, evaluation model, science supervision

THE EFFECTIVENESS OF PHYSICAL SPORT GAME LEARNING METHOD ON STUDENTS ENGLISH ABILITY

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Abstract

The background of this study is the results of learning English of physical education department (PJKR) students which achieved the lowest score in Faculty of Teacher Training and Education Muhammadiyah University of Sukabumi (FKIP UMMI). In general, students will be happy if the learning activity carry out is identical to fun activities such as playing, based on these assumptions this research planned by carrying out English learning activities using the physical sports game method. The purpose of this study was (1) to find out how the response and interest of students towards English Language Learning. (2) Knowing how the process of implementing English learning using physical sports game method. And (3) Knowing how the results of learning English using physical sports game method. The research methods used in this study are descriptive method and quasi-experimental method using one experimental class. Based on the process and results of the study, students responses to learning English using physical game method are very good, it can be seen from the enthusiasm and cooperative spirit shown in the implementation of learning, while the student learning outcomes increase by 55.31 points. Thus learning English using physical sport game method successfully increases the motivation and learning outcomes of PJKR FKIP UMMI students 2018/2019 academic year.

Keywords— Physical Sports Games, PJKR, English Ability
JOB EMBEDDED MODEL: ALTERNATIVE TEACHER PROFESSIONAL COMPETENCE DEVELOPMENT MODEL

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Abstract
The purpose of this paper is to provide an alternative model for the development of teacher professional competencies using job embedded models. The professionalism of a teacher as time goes by is increasingly questionable. This is because the development of technology and easy access to information media can shift the role of teachers in schools today. Nowadays there are many innovations that make students not need to meet the teacher to study. In addition, current innovations can reduce teachers who are less competent and replaced with technology that will hardly violate the rules and systems. Apart from that, currently the position of the teacher needs to be more competent than technology. However, in reality, there are still many teachers who are less professionally competent. If this is not addressed various kinds of problems can emerge, such as shifting the role of teachers with technology can occur. Thus, the need to develop teacher professional competencies so that teachers have better professional competency qualifications. There are various ways to develop teacher competencies, one of which is job embedded models. Job embedded is a system that can be used to develop teacher competencies, especially professional competence. With various kinds of activities in job embedded, it is expected that teacher competence can develop optimally. The method of this research is a literature review.

Keywords—Teacher competence, Professional competence, Job embedded model

THE EXISTENCE OF THE DEFINITE INTEGRAL: STUDENTS’ UNDERSTANDING

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Abstract
The definite integral is a part of a compulsory subject, Integral Calculus, for students who study in the mathematics education department. As pre-service
mathematics teachers, students’ understanding of the definite integral concepts is crucial to note. This article presents the result of the investigation students’ understanding of the definition of the definite integral and its existence. The study reported in this paper was done through qualitative research. A questionnaire about the definition of the definite integral and the existence of the definite integral of a defined function on a closed interval was given to 163 students who took Integral Calculus course. Then, 4 of them were selected to interview in depth. The students’ responses indicated the diversity of the conceptual understanding of the existence of the definite integral. Various students’ understanding of the definition of the definite integral that leads to students’ understanding of the existence of the definite integral is presented as well.

Keywords—calculus, conceptual understanding, the definite integral, students’ understanding

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THE CONTEXTUAL ACCOUNTING LEARNING MANAGEMENT BASED ON LESSON STUDY AT SENIOR HIGH SCHOOL

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Abstract
The research aims to analyze and describe the contextual accounting learning management that is done by the accounting teachers of Senior High School at Surakarta city. This research used research and development approach. The research subject was Senior High School accounting to teachers at Surakarta city. Data gathering method used: interview, observation and documentation. Data analysis technique used interactive analysis involving data gathering, data reduction, display, and verification. Data validity used triangulation method and sources. The research results showed that contextual accounting learning management that is done by Senior High School accounting teachers at Surakarta city is begun by making learning leading planning that is focus on syllabus, all teachers have not developed learning conducting planning independently. Most of them in education performing accounting still tend to use ceramah method, giving task and item exercise. Teachers still having problems in contextual accounting learning, Teachers have not fully understood and master contextual accounting learning. Teachers have not usual to link learning material with their real-life problems. Interaction management begin entering the class until the closing activity is dominated by the teachers (teacher center). Learning material management is conducted by an academic calendar
that is established by the headmaster. Learning evaluation is done through Oral, written and giving task/assignment.

Keywords: accounting; contextual; learning; lesson study; management

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**PISA-BASED STUDENT WORKSHEET FOR BETTER UNDERSTANDING OF MATHEMATICAL CONCEPT**

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Abstract
Teaching material is a significant aspect in learning. Student worksheet is one of teaching material to improve student understanding in classroom. However, many teachers could not effectively arrange and utilize it so that the learning objectives stated might not be reached. Formerly, what is a valid student worksheet to create and use it in an effective learning to gain better understanding in mathematical concept? This article is answering the question. Using development research adapted from ADDIE (analysis, design, development, implementation and evaluation, a PISA based student worksheet is compose. The result shows that the design is valid by expert judgment as well as student evaluation. It could improve student understanding of mathematical concept.

Keywords—mathematical concept, mathematics, PISA, student worksheet

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**UNDERGRADUATE’S PERCEPTION TOWARD CORPORAL PUNISHMENT**

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Abstract:
This study is conducted to find out the undergraduate’s perception toward the corporal punishment that may happens in the school. The subjects of the research are sixth semester students of English Department of Teacher Training and Education of Universitas Muhammadiyah Surakarta. The data were collected through close and open questionnaire and analysed using content analysis. Based on the analysis of the data, it is concluded that most
undergraduates experienced corporal punishment in the previous education before studying in the university. The experience of suffering corporal punishment leads the undergraduate’s perception toward the corporal punishment.

Keywords: Undergraduate, Perception, Corporal Punishment

INTERNALIZATION OF CHARACTER VALUE OF SOCIAL CARE FOR MADRASAH STUDENTS IBTIDAIYAH MUHAMMADIYAH IN EDUCATION DISRUPTION ERA

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Abstract
The purpose of this study are to describe the teacher’s efforts in strengthening the social caring character for students of MI Muhammadiyah. This study uses qualitative methods with the techniques of collecting data by using interviews, observation and documentation. To test the validity of research data using triangulation technique of source and triangulation technique. Data analysis techniques in this study consisting of reduction, data presentation and verification. The result of this study indicate that the strengthening of social care characters is implemented through 1) integration of self-development programs through routine activities, spontaneous activities, exemplary and conditioning. 2) integration in subject. 3) integrating school culture through social activities and social action, building community-class harmony, and emphathizing with classmates. The strengthening of social caring character in MI Muhammadiyah as a whole has gone well.

Keywords— internalization value, character, social care, students