BOOK OF ABSTRACTS

ICETECH 2019
The 1st International Conference on Education and Technology

“Emerging Innovative Learning across Disciplines in the Digital Era”

Madiun, 8th August 2019
Graha Cendekia, Universitas PGRI Madiun

Co Hosts:
FOREWORD

This book contains the abstracts of the First International Conference on Education and Technology-ICETECH 2019. The conference is hosted by Universitas PGRI Madiun (UNIPMA) and co-hosted by STKIP PGRI Jombang, Universitas Adi Buana Surabaya, STKIP PGRI Sidoarjo and Universitas PGRI Semarang. The purpose of ICETECH aims at facilitating researchers, academic scientists and educators in an attempt to share their knowledge and experience in the education and technology. This first edition has theme Emerging Innovative Learning across Disciplines in the Digital Era focusing on the eleven sub themes namely: (1) Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM), (2) STEM-based classroom management and Technology, (3) Robotic and game for Instructional Purpose, (4) Instructional technology and application for education, (5) Training and professional development for STEM teachers, (6) Computer-based learning, (7) Innovations in instructional training and education, (8) Design and implementation of technology-rich learning environment, (9) Augmented Reality for Education, (10) Simulation and Game for Educational Purpose, and (11) Virtual Reality for Education.

These sub themes will stimulate researchers, educators and practitioners who are interested in taking a part in the community’s development. Through their expertise in education and technology, they can invent something valuable for their learners so that they are worth contributing to their surrounding in the digital era. They are encouraged to adjust to the change of contexts over time for the sake of serving the learners. In an attempt to provide the teaching learning quality, it is necessary for them to keep up-to-date with recent development in education and technology, research and publication. ICETECH 2019 received 90 paper submissions from 8 provinces. To evaluate each submission, a doubleblind paper evaluation method was used: each paper was reviewed by at least two experts from the ICETECH Scientific Committee. There are 72 papers were selected to be presented as full papers during a 20- minute oral presentation. Based on the reviewers’ evaluations and on the presentations, the authors will be invited to submit extended versions of their papers for a proceeding which will be published by IOP Publisher. Firstly, we must thank the authors, whose research efforts are herewith recorded. Secondly, we thank the members of the Scientific Committee and the reviewers for their diligent and professional reviewing. Last but not least, we thank the keynote and invited speakers for their invaluable contribution and for taking the time to prepare their talks. We wish you all an exciting conference and an unforgettable stay in Madiun city. We hope to meet you again for next the 2nd ICETECH.

Chair of Organizing Committee
<table>
<thead>
<tr>
<th>No.</th>
<th>ID</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GS.AB-2</td>
<td>EMPLOYING RECIPROCAL TEACHING TO OVERCOME LEARNERS' BARRIERS TO</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EFFECTIVE LISTENING</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hesti Rokhaniyah, Shoffin Nahwa Utama</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>DEVELOPMENT OF HOLISTIC ENTREPRENEURSHIP TRAINING (HET) TO ENCOURAGE</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>THE BIRTH OF NEW ENTREPRENEURS TO DEFENDED STUDENTS</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Harwanti Noviandari, Agus Wicaksno</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>GS.AB-3</td>
<td>TYPES OF PROPORTIONAL REASONING OF SEVENTH GRADE JUNIOR HIGH SCHOOL</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wiwin Sri Hidayati, Lia Budi Tristanti</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>GS.AB-4</td>
<td>THE EFFECT OF PROBLEM BASED LEARNING (PBL) MODEL ON STUDENT LEARNING</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MOTIVATION TO PRODUCTS, CREATIVE AND ENTREPRENEURSHIP IN ELEVENTH GRADE</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SMK PGRI 1 JOMBANG</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Munawaroh, Nanik Sri Setyani</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>GS.AB-5</td>
<td>The Language Acquisition of Mentally Retarded Students at SLB Tunas</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Harapan</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>GS.AB-6</td>
<td>Measuring the Learners' Progress in L2 Writing Using Teacher Direct</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feedback in L2</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>GS.AB-7</td>
<td>SUBTITLING PHENOMENON OF INAPPROPRIATE VERBAL EXPRESSIONS: ITS</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IMPLICATIONS AND POTENTIAL INNOVATIONS IN TEACHING TRANSLATION</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>GS.AB-8</td>
<td>COURSES</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ahmad Basari dan Raden Arief Nugroho</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>GS.AB-9</td>
<td>Application of the Problem Based Learning (PBL) Learning Model as an</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Efforts to Develop Students Soft-Skill</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>GS.AB-10</td>
<td>STRATEGY OF EMPOWERMENT OF MICRO AND SMALL INDUSTRY OF LEATHER CRAFT</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In Magetan Regency</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lina Susilowati, Candra Fajri A, Khusnul Ashar and Susilo</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>GS.AB-11</td>
<td>SPEAKING MATERIALS DEVELOPMENT BY USING DIGITAL STORYTELLING MEDIA</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ety</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>GS.AB-12</td>
<td>Differences of Physical Education Teachers teaching skills Viewed from</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Students' Creative Thinking Skills B Basuki, Ilmul Ma'arif, Yudi Dwi</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Saputra</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>GS.AB-13</td>
<td>SHAPING A STUDENT AUTONOMOUS LEARNING BEHAVIOR THROUGH HUMAN</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>AGENT APPROACH (A SYNTHESIS APPROACH OF SOCIAL COGNITIVE THEORY)</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>GS.AB-14</td>
<td>PERSPECTIVE Alfaiz, Asroful Kadafi, Yuzarion, Rahmadianti Aulia</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Influence of Understanding NOS to Students Conceptual Understanding</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>and Science Process Skill on Chemistry Classroom</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>THE EFFECT OF CORAL REEFS COMIC MEDIA IMPLEMENTATION ON STUDENT'S</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ENVIRONMENTAL CARE ATTITUDES IN WEST NUSA TENGGARA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Akhmad Sukri1*, Septiana Dwi Utami2, Zurlina3, Gito Hastuti4,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marheny Lukitsarasi5</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>GS.AB-16</td>
<td>Biology Prospective Teachers' Critical Thinking Disposition and Critical Thinking Skills of</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IKIP Mataram Hunaepi, Laras Firdaus, Taufik Samsuri, Endang Susantini,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Raharjo</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>GS.AB-17</td>
<td>Transactional database design information system web-based tracer study</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>integrated telegram bot1Sucipto, 2Nalsa Cinta Resti, 3 Teguh Andriyanto,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4Jamilah Karaman</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>GS.AB-18</td>
<td>STATISTICAL REASONING LEVELS AND ERROR ANALYSIS OF PROSPECTIVE</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Local Context of Syir Jawi Budi Utami by Syekh Muhammad Djamaluddin</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ahmad As the Identity of Tarekat As-Saziliyah Members in Jombang1. Mu'minin 2. Ahmad</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>GS.AB-20</td>
<td>Saqqi Ahya’</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Use of Computer Adaptive Testing (CAT) in 4.0 Era for Assessing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>English Proficiency in CLIL Classroom context: implementation and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>challenges lma Taufiqur Rohmah, Mursid Saleh, Abdurrahman Faridi,</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>GS.AB-21</td>
<td>LEARNING MATH WITH AHSLM 472319 METHOD AS ALLAH CONCEPT TO CREATE</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>UNIVERSEM Aziz</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>GS.AB-22</td>
<td>DIGGING STUDENTS' UNDERSTANDING ON CORAL REEFS: THE FORGOTTEN LOCAL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>POTENTIAL Akhmad Sukri1, Septiana Dwi Utami2, Zurlina3, Gito Hadiprayitno,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marheny Lukitsarasi5</td>
<td>19</td>
</tr>
<tr>
<td>23</td>
<td>GS.AB-23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS.AB-24</td>
<td>The Implementation of Multiple Media in Improving Reading Comprehension Skill in the University Students</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>GS.AB-25</td>
<td>PROBLEM BASED LEARNING ON NON EUCLIDEAN GEOMETRY MATTER FOR PRACTICING CRITICAL AND CREATIVE THINKING</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>GS.AB-26</td>
<td>DEVELOPING EFL CRITICAL READING SYLLABUS AND MATERIALS FOR STUDENTS OF THE ENGLISH DEPARTMENT -IKIP</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>GS.AB-27</td>
<td>Evaluating of students logical thinking ability: TPACK model as a physics learning strategy to improve students logical thinking abilityAhmad Furqon Muzaaky, Widha Sunarno, Harjana</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>GS.AB-28</td>
<td>Workshop Multimedia Based Learning for Teachers Basic Level Education</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>GS.AB-29</td>
<td>Buntoro, Indah Puji Astuti, Dwiyono Ariyadi Developing a Prototype Handout Literature-Based Instruction for Essay Writing</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>GS.AB-30</td>
<td>CourseLestari setyowati ; Sony Sukmawan Development of Integrated Augmented Reality Module to Improve the High Order</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>GS.AB-31</td>
<td>Thingking Skill of Physics Vocational High School Grade XP Purwandari, Adi Purwito GOOD CHARACTER IMPROVEMENT OF MILLENIAL GENERATION IN COMMUNITY ERA</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>GS.AB-32</td>
<td>Reconsidering our textbooks' concept about sun's gravitational force : A comparison to quasarBertha Wikara, Sutarno, Suranto, Sajidan A Syllabus Design to Enhance Vocabulary and Reading Skills in Computer Assisted</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>GS.AB-33</td>
<td>Language LearningLaily Nur Affini, Ajeng Setyorini, Dias Andris Susanto Application of the SETS Approach in Storytelling Learning for Teachers of PAUD</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>GS.AB-35</td>
<td>THE IMPLEMENTATION OF INOVATIVE LEARNING MODELS AND BASED HOTs SCIENTIFIC APROACH ON LESSON PLAN OF INDONESIAN LANGUAGE AT SCHOOLS V. Teguh Suharto; Asri Musandi Waraulia; Tuti Hermayani Numerical Study the Influence of Radius Stack on the Low Heating Temperature and Efficiency Thermoacoustic Engine Type Traveling WaveS W Utami, I Farikah, N Khoiri, S Patonah, U Kultsum, S Suciati Enhancing Biology-Critical Thinking Skill Student through CIRC-Based Scientific</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>GS.AB-38</td>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS.AB-39</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS.AB-40</td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS.AB-41</td>
<td>39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS.AB-42</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS.AB-43</td>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS.AB-44</td>
<td>42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS.AB-45</td>
<td>43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS.AB-46</td>
<td>44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS.AB-47</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GS.AB-48</td>
<td>46</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
47 GS.AB-51 Technology Used in Teaching Learning Process of Teacher Candidates of English Study Program, Universitas PGRI Semarang
Maria Yosephin Widarti Lestari1, Siti Musarokah2, Asyifa Dinari3

48 GS.AB-52 HOTS Android-Based Student Worksheets to Practice Creative Thinking Ability of Vocational School Students
Agung Budi Prastyo, Sardulo Gembong, Titin Masfingatin, Swasti Maharani

49 GS.AB-53 UNDERSTANDINGRENdra Nur Cahya, Edy Suprapto, Restu Lusiana, Sanusi
WAYANG REVELITIZATION IN DEVELOPING THE MORAL VALUE OF ELEMENTARY SCHOOL STUDENTS
Lita Erdiana, Rosyidah Umami Octavia, Oktaviani Dewi Susanti, Shierly Novalita Yappi

50 GS.AB-54 THE ADVANTAGES OF DUTCH LANGUAGE ACQUISITION FOR HISTORY EDUCATION
Yudi Prasetyo, A. Fathikul Amin A., Izzatul Fajriyah, Satrico Wibowo, Nuril Fitrianingrum

51 GS.AB-55 The Role of Literature to Develop Critical Thinking Skill: A Case Study of Developing Critical Thinking of Low Achievement Students of English as a Foreign Language through Reading Poems
Siti Aisyah, Sulistyaningsih, Yulianto Sabat, Endah Harumi, and Amaliah
Indonesian National Literacy Education: The Real Primary School Program
Fida Chasanatun, Dwi Setyadi, Dheetyas Glibson Rajindra Azizi, Latifa Dahniar

52 GS.AB-56 THE EFFECT OF QUANTUM LEARNING MODEL HELPED AUDIO-VISUAL MEDIA ON STUDENT LEARNING OUTCOMES IN CLASS IV SDN NGUNUT II, KECAMATAN BANDAR, KABUPATEN PACITANG
Gandhi Katon Wibawanti, Liya Atika Anggrasari, Fida Rahamantika H

53 GS.AB-57 THE INFLUENCE OF PERFORMING RESEARCH CULTURE AND WRITING MOTIVATION AND LECTURER COMPETENCE TO COMMITMENT IN DOING RESEARCH AND LECTURER RESEARCH PRODUCTIVITY IN PRIVATE UNIVERSITIES IN EAST JAVA
Riyanto1; A Sriekaningsih2; R R Siga3; W Wijianto4

54 GS.AB-58 Integrated STEM Project Based Learning Implementation to Improve Science Process Skills
Yoga Budi Bhakti, Irnin Agustina Dwi Astuti, Indica Yona Okyranida, Dwi Aprillia Setia Ashir, Ika Krisdiana, Vera Dewi Susanti, Tri Andari

55 GS.AB-59 QUESTIONING STRATEGIES BASED ON STUDENTS' COGNITIVE LEVELS THROUGH STEM IMPLEMENTATION IN ENGLISH FOR ACADEMIC PURPOSES CLASSROOMS
Sumbani, Fabiola D Kurnia, Syafi'ilul Anam

56 GS.AB-60 Improving Learning Quality in Classic Literature Through Lesson Study in Sixth Semester Students of Indonesian Language and Literature Education of Universitas PGRI Madiun
R Soleh, AB Santososo, E Winarsih
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>68</td>
<td>AN ITEM ANALYSIS OF MULTIPLE CHOICE QUESTIONS ON ENGLISH FINAL TESTS</td>
<td>Arifin, Nuri Ati Ningsih, Woro Widowati</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Error Analysis of Students with Concrete Sequential Thinking Styles in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Solving Elimination-Substitution Problems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jeni Sri Winarti, Sardulo Gembong, Wasilatul</td>
</tr>
<tr>
<td>69</td>
<td>THE EFFECTIVENESS OF THE TOURNAMENT CO-OP CO-OP AND TEAMS GAMES (TGT)</td>
<td>Murafi’ah, Davi Apriandi</td>
</tr>
<tr>
<td></td>
<td>LEARNING MODEL ON MATHEMATICAL LEARNING ACHIEVEMENTS IN CLASS VIII</td>
<td>STUDENTS FROM STUDENT LEARNING MOTIVATION</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Puput Mey Indrawati, Davi Apriandi</td>
</tr>
<tr>
<td>70</td>
<td>ANALYSIS OF STUDENTS DIFFICULT IN SOLVING RELATIONS AND FUNCTIONS</td>
<td>Apriandi, Reza Kusuma Setyansah, Darmadi</td>
</tr>
<tr>
<td></td>
<td>QUESTIONS BASED ON LEARNING INDICATORS(1) Masjudin, (2) Ahmad Muzaki,</td>
<td>(1) Masjudin, (2) Ahmad Muzaki, (3) Ade Kurniawan, (4) Yuntawati, (5) Rissa Prisma K.</td>
</tr>
<tr>
<td>71</td>
<td>SCHOOL AND CHARACTER CULTURE RELATION AS AN EFFORTS TO IMPROVE THE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>QUALITY OF BASIC SCHOOL QUALITY IN THE CITY OF EAST JAVA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tin Mdalawati</td>
</tr>
<tr>
<td>72</td>
<td>Pragmatics and the Development of Habituation of Character Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>through</td>
<td></td>
</tr>
<tr>
<td>73</td>
<td>A Syllabus Design to Enhance Vocabulary and Reading Skills in Computer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assisted</td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>MATHEMATICS PRE-SERVICE TEACHER’S ANALOGICAL REASONING TOWARD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CALCULUS PROBLEME</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laily Nur Affini, Ajeng Setyorini, Dias Andris Susanto</td>
</tr>
<tr>
<td>75</td>
<td>TEACHING WRITING BY USING EVERNOTE APPLICATION</td>
<td>Dhewy; Nurina Ayuningtyas; Lailatul Mubarokah; Ahmad Isobar</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>76</td>
<td>IMPLEMENTATION OF THE SCIENTIFIC APPROACH ON SOCIAL STUDIES LEARNING</td>
<td>Widiyani Styati, Krismi Natalia</td>
</tr>
<tr>
<td></td>
<td>BASED ON LOCAL WISDOM THROUGH ADVANCED ORGANIZER LEARNING MODELS OF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>THE STUDENTS OF JUNIOR HIGH SCHOOLS</td>
<td></td>
</tr>
<tr>
<td>77</td>
<td>DEVELOPING AN INTERCULTURE-BASED ASSESSMENT MODEL IN THE TEACHING OF</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPEAKING SKILLS FOR ELT STUDENTS IN HIGHER EDUCATION</td>
<td></td>
</tr>
<tr>
<td>78</td>
<td>Pengembangan model pembelajaran berbasis proyek dengan time management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>technique dalam menurunkan prokrastinasi akademik mahasiswa pada mata</td>
<td></td>
</tr>
<tr>
<td></td>
<td>kuliah Perkembangan Peserta DidikDahlia Novarianing Asri1) Rischa Pramudia Trisnani2)</td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>Reducing Social Conflict through Learning Translation as Multi-culture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Understanding</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>Achievement Motivation Training (AMT) in Entrepreneurship Subject with</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Game</td>
<td></td>
</tr>
<tr>
<td>81</td>
<td>Tournament Satroji Budiwibowo</td>
<td></td>
</tr>
</tbody>
</table>
EMPLOYING RECIPROCAL TEACHING TO OVERCOME LEARNERS’ BARRIERS TO EFFECTIVE LISTENING

Hesti Rokhaniyah, Shoffin Nahwa Utama

Universitas Darussalam Gontor

Abstract
The aim of this action research project is to describe whether or not and to what extent Reciprocal Teaching can overcome learners’ barriers to effective listening and identify the class climate when Reciprocal Teaching is implemented. The data were obtained using several techniques including test, interview, and observation. The quantitative data were derived by calculating mean score of two raters; the qualitative data were analyzed using Constant Comparative Method. The finding of the research showed that the implementation of Reciprocal Teaching (1) overcame learners’ barrier to listening: (a) keywords recognition to identify appropriate topic; (b) limited knowledge of vocabulary and grammar; (c) different range of accents. The significance of Reciprocal Teaching on listening barrier could be seen from the enhancement of learners’ score: the mean score of pretest was 64.8; post-test 1 was 73.4; and post-test 2 was 81.5; and (2) optimized the class climate including: (a) learners were encouraged to be supportive of and receptive to each other’s communication during active listening; (b) conversations got better and learners felt freedom to open up their ideas; (c) most learners were engaged to work with their classmates due to mutual task. Considering the result of this study, it is recommended that lecturers are able to use this research for: guiding the learners to overcome listening barrier through Reciprical Teaching; and being creative to create positive class climate.

Keyword
:Keywords: Reciprocal Teaching, Barriers, Listening

Topic
:Innovations in instructional training and education
DEVELOPMENT OF HOLISTIC ENTREPRENEURSHIP TRAINING (HET) TO ENCOURAGE THE BIRTH OF NEW ENTREPRENEURS TO DEFENDED STUDENTS

Harwanti Noviandari, Agus Mursidi, Heriberthus Wicaksono
Universitas PGRI Banyuwangi

Abstract
Students with disabilities must be encouraged to become strong and independent individuals, so that their limitations do not prevent them from continuing to work and move forward. One of them is motivating students to become entrepreneurs. Holistic Entrepreneurship Training (HET) consists of four training programs that are designed, holistically namely 1) technical training in the skills of making products or services; 2) entrepreneurship training and business venturing; 3) NLP training to build a strong mentality so that they can become psychological capital as entrepreneurs; and 4) conduct training online marketing. The target of the training participants is students with high school disabilities in grade 12. They are students who will graduate from school. It is expected that after participating in the training program, students can become entrepreneurs. Data collection is done by observation, interviews, and questionnaires. Data is collected longitudinally within 3 years. Data collection is carried out four times, namely 1) before the program implementation; 2) at the end of the program in the first year; 3) at the end of the program at the end of the second year; and 4) at the end of the program in the third year. Data analysis was carried out in descriptive statistics and inferential. Different tests are carried out on each measurement aspect that has been determined in data collection 1 to retrieval of data 4. Measurement of training effectiveness is carried out with psychology capital and indicators of intention-behavior by using planned action theory components (TPB).

Keyword: people with disabilities, entrepreneurs, HET
Topic: Innovations in instructional training and education
TYPES OF PROPORTIONAL REASONING OF SEVENTH GRADE JUNIOR HIGH SCHOOL STUDENTS IN JOMBANG

Wiwin Sri Hidayati, Lia Budi Tristanti

STKIP PGRI JOMBANG

Abstract
This research is a descriptive qualitative research that aims to describe the type of proportional reasoning of students. The research subjects were seventh grade students of SMP in Jombang Regency. The subject selection procedure is by purposive sampling. Data collection is done by means of tests, think aloud methods and semi-structured interviews. Data validity uses time triangulation. Data analysis techniques are carried out by: (1) grouping data in 4 categories, then reducing data not included in the 4 categories, (2) presenting data in narrative texts, and (3) concluding the type of proportional reasoning students then comparing subjects that are on the same type of proportional reasoning. Based on research conducted on 150 subjects of class VII SMP in Jombang regency, there were 62 students using cross multiplication, 30 students used additive reasoning, 45 students used multiplicative reasoning and 13 students used a mix of additive and multiplicative reasoning. Additive reasoning, the way the subject does it is to add one by one to many caterpillars associated with many leaves. In determining the missing value, the subject uses multiplicative reasoning by determining the scalar number first. Subjects with a mix of additive and multiplicative reasoning use numerical calculations and use images to reason problems. Cross multiplication, Subjects use the concept of comparable value by specifying unknown elements with a variable. Although not all subjects use formal reasoning (cross multiplication) in completing, but the reasoning of class VII students shows that it includes relative reasoning. They don't just pair numbers with numbers.

Keyword: Reasoning, Proportional, Additives, Multiplicative, Cross Multiplication

Topic: Virtual Reality for Education
THE EFFECT OF PROBLEM BASED LEARNING (PBL) MODEL ON STUDENT LEARNING MOTIVATION TO PRODUCTS, CREATIVE AND ENTREPRENEURSHIP IN ELEVENTH GRADE OF SMK PGRI 1 JOMBANG

Munawaroh, Nanik Sri Setyani

STKIP PGRI JOMBANG

Abstract
The teaching and learning process at SMK PGRI 1 Jombang is still using teacher centered and it is the only one source of information obtained by students. So, it is necessary to be done student-centered learning model in order to be able to provide student motivation. The purpose of the study is to explain whether or not the influence of the use of Problem Based Learning (PBL) Model on Students Learning Motivation to Product, Creative and Entrepreneurship Subjects in eleventh grade students of Management Automation Office Department. The study used a type of quantitative research with a simple linear regression test. Data collection methods used observation, questionnaire, and documentation. Based on the results of the Simple Linear Regression test obtained t test with sig 0.001. Because the value of sig 0.001
The Language Acquisition of Mentally Retarded Students at SLB Tunas Harapan Jombang.

Heny Sulistyowati, M. Farkhan

STKIP PGRI Jombang

Abstract

Abstract This Research focused on the language acquisition of mentally retarded students at SLB Tunas Harapan Jombang. This research focused on the speaking skill. This research problem formulated how mentally retarded students master the speaking skill at third grade SDLB Tunas Harapan Jombang. Speaking skill means a skill taught to students to be able to speak well in reciting each letter, each consonant, then each word, and how to pronounce them correctly. It aims that students have no difficulty to pronounce the articulation by using manipulative media to facilitate students’ understanding in speaking. This research aims to analyze the speaking skill of mentally retarded students. It is conducted to facilitate the teaching learning process in the classroom, to communicate in the community and to introduce how mentally retarded students pronounce letters and words. The researchers chose one research subject from mentally retarded students, Anannda Cika. The method used in this research is descriptive qualitative method because the researchers try to describe the pronounced words, mimicked words for speaking skills by introducing the letters while interviewing the subject. The results showed that the learning outcomes of Ananda Cika had good development. It was proved by Cika’s better performance seen from Cika’s learning book note, Cika’s learning in speaking. Cika’s learning development can be known by knowing the letters and vocabularies’ pronunciation obtained when interacting with teammates, teachers and family environment. Keywords: Language Acquisition, Speaking Skill, Mental Retardation
Measuring the Learners’ Progress in L2 Writing Using Teacher Direct Feedback in L2 Writing Class

Tazkiyatunnafs Elhawwa, Dwi Rukmini, Januarius Mujiyanto, Djoko Sutopo

Universitas Negeri Semarang

Abstract
Giving feedback in L2 writing class is a vital skill for L2 writing teachers. The study is aimed at finding the significance impact on the learners’ writing achievement: prior, during, and post the treatment using Teacher Direct Feedback at the L2 learners of IAIN Palangka Raya. The study design is a quasi-experimental research using repeated measure. In this case, the participants were given three times of tests: before, during and after the treatment. The data were collected through a writing test. The method of data analysis was used a one-way anova repeated measure. The findings revealed that there was a sharp difference on learners’ performance of writing: prior (mean=57.04), during (mean=63.56), and post (mean= 72.88) the treatment. The output showed that Wilk’s Lamda= 0.056, F= 1.94, p

Keyword :teacher direct feedback, L2 writing

Topic :Augmented Reality for Education
SUBTITLING PHENOMENON OF INAPPROPRIATE VERBAL EXPRESSIONS: ITS IMPLICATIONS AND POTENTIAL INNOVATIONS IN TEACHING TRANSLATION COURSES

Achmad Basari dan Raden Arief Nugroho

Universitas Dian Nuswantoro

Abstract

When watching a particular TV show, we know that millions of others are also watching it. It happens because the program has been verified, produced and created by professionals. Needless to say, TV shows are made for various ages and different programs. The attractions of such cartoon movies lie not only on their stories but also on the subtitles in the target audience language. The subtitles are provided to help the audience, children in particular, understand what are being spoken by the characters in the movie. However, the language used in the subtitles still needs filtering to adjust with cultural propriety of the target audience since there are some inappropriate verbal expressions. By employing descriptive qualitative method, this study reveals the strategies used to render the subtitles in the cartoon movies for children on TV shows. The sample of this study was the cartoon movie ‘Kung Fu Panda 2’. In order to assess the use of subtitling as a language filter, the authors employed Gottlieb’s theory of subtitling strategies (1992). Then, the verification of the results was done by utilizing the theory of translation quality assessment which focused on its acceptability aspect. The results of the study show that some subtitling strategies which embody cover-up function, such as paraphrase, are able to filter malevolent expressions. This phenomenon shows that content concealment through subtitling strategies does well to produce child-friendly TV shows. This also implies to the context of pedagogy. Students can make use of the subtitling technology software like AEGISUB

Keyword

: AEGISUB software, child-friendly TV shows, inappropriate verbal expressions, subtitling

Topic

: Innovations in instructional training and education
APPLICATION OF THE PROBLEM BASED LEARNING (PBL) LEARNING MODEL AS AN EFFORTS TO DEVELOP STUDENTS SOFT-SKILL

Diah Puji NaliBrata, Agung Kesna Mahatmaharti

STKIP PGRI JOMBANG

Abstract
Currently, many implementation of higher education curriculum is still oriented at development of hard skills. Meanwhile, global market requires graduates with both hard skills and soft skills. Graduates’ soft skills are mainly affected by teaching strategy and model used by their lecturers. This current research aims at describing the implementation of a teaching model, i.e. Problem-based Learning (PBL) and effects of the teaching model on students’ soft skills. Descriptive qualitative was employed as the research approach. Triangulation of data source and method was implemented to collect the data, and case study was used to analyze the data. This research resulted that the implementation of PBL in Anthropology Course is learning in which problems are presented to reconstruct the culture of rural community. Students worked in a team to solve authentic problems in a community, developed and presented their way of solving the problems, as well as evaluated the process of solving the problems. The effect of the implementation of PBL was the students understood the course material contextually, were skillful in collecting qualitative data, were more knowledgeable in facing the village community, improved their soft skills in terms of written and spoken communication, a way of thinking (critical, creative, and logic), problem solving skills, team working, and interpersonal and work ethics. As an effort of strengthening students’ characters to face revolution industry 4.0, this research showed that graduates should have skills of 4 Cs (Critical Thinking, Creativity, Communication, and Collaboration Skills).

Keyword
: Problem-based Learning (PBL) Model, Soft skills, Industry 4.0.

Topic : Innovations in instructional training and education
STRATEGY OF EMPOWERMENT OF MICRO AND SMALL INDUSTRY OF LEATHER CRAFT IN MAGETAN REGENCY

Lina Susilowati, Candra Fajri A, Khusnul Ashar and Susilo

STKIP PGRI JOMBANG

Abstract
This study aims to determine the empowerment strategy of micro and small industries of leather craft in Magetan. By using the same data from 10 selected respondents from Department of Industry and Commerce (DISPERINDAG) Magetan Regency, the owner of micro and small industry of leather craft, and leather craft community. The analysis technique used Analytical Hierarchy Process (AHP). The AHP results show that there are four alternative fields that are the respondents, the first are human resources, the second are innovations, the third are productions and the last are marketing. Based on the results of AHP analysis, the alternative program in the whole program of empowerment of micro and small industries of leather craft in Magetan Regency are: 1) Basic education and training with Leather Hall and College, 2) Skill improvement, 3) introduction of new products, 4) training and creativity of production, 5) opening market opportunities through exhibitions and social media, 6) reduce sales tax for micro and small industries, 7) entrepreneurship training, 8) new production technology, 9) development of existing products, 10) provide galleries for the marketing of micro and small industries, 12) facilitate the procurement of raw materials.

Keyword: Analytical Hierarchy Process (AHP), empowerment strategy, micro and small industries of leather craft

Topic: Design and implementation of technology-rich learning environment
SPEAKING MATERIALS DEVELOPMENT BY USING DIGITAL STORYTELLING MEDIA

Ety Youhanita, Abd Ghofur, Sutarum, Ratna Nurdianna, Endah Yuliani

STKIP PGRI Lamongan

Abstract
This study aims to develop teaching materials for English skills in high school on class XI which refers to the 2013 curriculum. The development of teaching materials for the speaking material is based on digital storytelling media. The method used in this study uses the Research and Development (R & D) model which includes potential and problems, data collection, product design, design validation, design revisions, product trials, product revisions, trials, and usage. The development products produced were validated by media experts and material experts before being tested on students and English teachers at SMA N 1 Lamongan. The results of media validation conducted on two validators stated that as many as 77% by validator I, and 80% by validator II. The results of the validator generally state that teaching materials (media) are developed in accordance with the learning objectives and are feasible to use. While the results of student validation in small groups state that as many as 93% of the teaching materials developed are very feasible to use in the learning process and get a positive response from students. While the English teacher stated that as many as 87% of the teaching materials developed were very feasible to be used as media in the learning process and were one of the learning innovations.

Keyword: Teaching Materials, Speaking Materials, Digital Story Telling

Topic: Instructional technology and application for education
Differences of Physical Education Teachers teaching skills Viewed from Students' Creative Thinking Skills

B Basuki, Ilmul Ma’arif, Yudi Dwi Saputra

STKIP PGRI Jombang

Abstract
This study aims to determine the teacher’s skills in teaching in terms of students' creative thinking skills. In harmony with the educational goals and objectives of physical education, sports and health which contain the intellectual, mental, social and emotional dimensions and the use of curriculum 13 as the vehicle to achieve these goals. Curriculum 13 to achieve that goal suppresses 4C namely critical, creative, collaborative and communicative. In this study, it was seen from the creative side of the students that were raised. This type of quasi-experimental research uses a comparative causal design. The study population was all eighth grade students in State Middle School 1 Diwek and MTS Negeri 15 Jombang. The sampling technique in this study used random sampling of classes, a sample of 64 students. Data collection of this study uses the sheet of teaching skills and test thinking of students. The data in this study were analyzed using SPSS 20 and used a significance level of 0.05. The skills of the PJOK teacher can be seen from the teacher's description in conditioning during the learning process. Based on the results obtained by the PJOK teacher data in SMP N Diwek 1, the score was 83.33%. While PJOK teachers in MTs N 15 Jombang get a value of 70% and data analysis shows that the probability value is less than 0.05 which is equal to 0,000 so that the null hypothesis can be withdrawn rejected and the research hypothesis accepted. This means that there are differences in

Keyword : Teacher skills, PJOK Teachers, Creative thinking skills
Topic : Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
SHAPING A STUDENT AUTONOMOUS LEARNING BEHAVIOR THROUGH HUMAN AGENCY APPROACH (A SYNTHESIS APPROACH OF SOCIAL COGNITIVE THEORY PERSPECTIVE)

Alfaiz, Asroful Kadafi, Yuzarion, Rahmadianti Aulia

STKIP PGRI Sumatera Barat Universitas PGRI Madiun Universitas Ahmad Dahlan Universitas Islam Negeri Imam Bonjol Padang

Abstract

Human agency is a concept that based on social cognitive theory argue that human is a well being such planning, discipline, realization and evaluate their own behavior in life circumstance including in learning. It has been studied in education with four core properties such intentionally, forethought, self-reactiveness, and self-reflectiveness. This property describes personally a person has own decision in behaving to the environment as an actor, not a reactor. In literature, it can be used to shape a student autonomous learning, because the concept of autonomous learning has a self-autonomy and self-management. This is a link with core properties of human agency, if individual always depends on their environment, that because he does not have an agentic aspect in his life circumstance. According to elfira’s research that conducts in 2012, has found that a student has a lack of autonomous in learning, and also from survey that conduct in 2017-2019 it’s found that 61.23% students in 4 senior high school has lower autonomous learning, this condition has no special treatment in counseling. This phenomena influence to their cheating and procrastination behavior. On this article will give a new recommendation about alternative intervention in guidance and counseling practice about the human agency to shape an autonomous learning behavior and also internalization core properties of human agency in counseling process in the context in learning

Keyword


Topic

: Innovations in instructional training and education
The Influence of Understanding NOS to Students Conceptual Understanding and Science Process Skill on Chemistry Classroom

Yusran Khery*, Bq. Asma Nufida*, Suryati*, Sri Rahayu**, Endang Budiasih**

*IKIP Mataram, Jalan Pemuda 59 A, Mataram, Indonesia **Universitas Negeri Malang, Jalan Semarang 5 Malang 65145

Abstract
This aims of this research was to evaluate the effect of Understanding Nature of Science (NOS) to Students Conceptual Understanding and Science Processes Skills on General Chemistry Classroom. Based on ex-Post Facto research, this was carried out in stages: (1) conducting an NOS understanding questionnaire trial; (2) do subject categorization based on their Understanding NOS; (3) applying general chemistry learning; (4) observing science process skills and understanding student concepts. The research was carried out at the Faculty of Mathematics and Science Education of IKIP Mataram. The research subjects were 75 students participating in the General Chemistry course for the academic year 2018-2019 that was collected by saturated sampling. Data were collected using an understanding NOS questionnaire, Conceptual Understanding Test, and Science Process Skills observation sheet. Data is described and hypothesis testing was done by One Way Anova test for uncorrelated samples. The results of the study showed that there was an influence of the Understanding of NOS to Students Conceptual Understanding and Science Processes Skills.

Keyword
: Understanding NOS, Conceptual Understanding, and Science Process Skill

Topic
: Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
THE EFFECT OF CORAL REEFS COMIC MEDIA IMPLEMENTATION ON STUDENT’S ENVIRONMENTAL CARE ATTITUDES IN WEST NUSA TENGGARA

Akhmad Sukri1*, Ismail Efendi2, Ria Hastuti3, Agus Ramdani4, Marheny Lukitasari5

1,2Department of Biology Education, IKIP Mataram, Indonesia 3Student of Biology Education Department, IKIP Mataram, Indonesia 4Department of Biology Education, Universitas Mataram, Indonesia 5Department of Biology, UNIPMA, Indonesia *corresponding

Abstract

The purpose of this study is to analyze students' attitudes towards coral reef ecosystems which is one of the local potentials of the region through the implementation of coral reef comic media in West Nusa Tenggara. This study is a quasi-experimental study that adopts and modifies the separate sample pretest-posttest designs. Two experimental schools originating from Sumbawa Regency, i.e. SMAN 1 Alas and SMAN Muhammadiyah Alas were randomly selected with a total of 60 students. The attitude of environmental care for the students' environment was collected through questionnaires. The scores on the questionnaire were converted into percentages then were analyzed by using paired sample t test to see the differences in student’s attitudes before and after treatment in each school, and the independent sample t-test is used in order to see the differences in student attitudes between the observation schools. The results showed that (1) there were differences in student attitudes before and after given treatment by using coral reef comic media in both schools (p
Preparing prospective teachers as professional teachers is a very basic part of universities based on education and teacher training. In order to support professionalism career, prospective teachers must be equipped with 21st century skills, one of which is critical thinking skills, but to be able to think critically, prospective teachers must also have a critical thinking disposition, because critical thinking disposition is a prerequisite for acquiring critical thinking skills. This research is a survey study aimed at explaining the relationship between thinking dispositions and critical thinking skills. The prospective teachers critical thinking skills data were collected using essay questions, while the critical thinking disposition was collected using a critical thinking disposition questionnaire adopted from the California Critical Thinking Disposition Inventory (CCTDI). The Sample in this research is taken by simple random sampling, obtained sample or respondent as many as 103 prospective teachers. The data in this study was statistically analyzed using Pearson product-moment \( r \). Based on the result of an analysis, \( R \)-value is 0.209. This \( r \) value indicates the low critical thinking disposition of prospective teachers, although there is a relation between the critical thinking disposition itself and the critical thinking skills of the prospective teachers, so that the value of \( r \) also indicates to be taught about the critical thinking disposition to the prospective teachers to acquire critical thinking skills as their professional career supporters.

**Keyword**

: Critical Thinking Disposition, Critical Thinking Skills

**Topic**

: Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
Transactional database design information system web-based tracer study integrated telegram bot

1Sucipto, 2Nalsa Cintya Resti, 3 Teguh Andriyanto, 4Jamilah Karaman

1,2,3Universitas Nusantara PGRI Kediri, 4Universitas Muhammadiyah Ponorogo

Abstract
Database is software used to store the data. Basically, stored data is in the text form. Database function is not only to store the data but also to accelerate the access of information system. Optimal database management can enhance access of information system. One of management that can improve the performance is an appropriate data relational design. Relational is join table. Database relational design should pay attention on data type election, data type value, and constraint that will be chosen. The researcher will examine about optimalisation of MariaDB database transactional on the information system of tracer study. Database design will relocate data from to application sources namely we and telegram bot based application. The use of two lanes to database is to simplify the user to register through telegram bot, afterwards user can access questioner of trace study on web based application. The MariaDB database performance test shows that the highest performance average query is 6501 microsecond.

Keyword
: database, bot, MariaDB, query

Topic
: Design and implementation of technology-rich learning environment
STATISTICAL REASONING LEVELS AND ERROR ANALYSIS OF PROSPECTIVE MATHEMATICS TEACHER STUDENTS

1. Abd. Rozak
2. Nurwiani

STKIP PGRI JOMBANG

Abstract
This paper describes the level of statistical reasoning and the difficulties and errors that occur in statistical problem-solving in prospective mathematics teacher students at STKIP PGRI Jombang. This research is a qualitative study with a case study strategy, the case study in the process of solving statistical problems carried out by the subject. The research subjects were the 69 students at third-semester of Mathematics Education Program STKIP PGRI Jombang who had taken descriptive statistics. The results of this study indicate that students are not found at the idiosyncratic level, most of them are at the transitional and quantitative level, while the analytical level is still a minority.

Keyword: Statistical Reasoning, Error Analysis
Topic: Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
The Local Context of Syiir Jawi Budi Utami by Syekh Muhammad Djamaluddin Ahmad As the Identity of Tarekat As-Saziliyah Members in Jombang

1. Mu'minin 2. Ahmad Sauqi Ahya'

STKIP PGRI Jombang

Abstract

Siyir Jawi Budi Utami by Syekh Muhammad Djamaluddin Ahmad is chants that are created to facilitate the understanding of the Tarekat Al-Saziliyah members in understanding Al-Hikam’s book written by Ibn Atho’ílah. Al-Hikam was used as a reference to compose Syiir Jawi Budi Utami. The syiir is sung during the Al Hikam recitation on Monday night at the Al Muhibbin Islamic Boarding School in Bahrul Ulum Tambak Beras Jombang. Reading Syiir is an effort to overcome the moral crisis of Jombang community. The result of the research shows that local context of syiir Jawi Budi Utami by Syekh Djamaluddin Ahmad is able to establish the identity of Tarekat Al-Saziliyah members in Jombang. The Local context covers the local cultures of Islamic boarding school such as praying, praising, being humble, giving alms, and expecting the blessing of prayer. Another local context covers the tarekat cultures such as Mursyid, Salik, riyadhah, tafakur, Tazkiyah An-Nafis, dzikir, mujahadah, muhasabah, muraqabah, and rabitah.

Keyword : Local Context, Identity, Tarekat As-Saziliyah
Topic : Innovations in instructional training and education
The Use of Computer Adaptive Testing (CAT) in 4.0 Era for Assessing English Proficiency in CLIL Classroom context: implementation and challenges

Ima Isnaini Taufiqur Rohmah, Mursid Saleh, Abdurrachman Faridi, Sri Wuli Fitriati

Universitas Negeri Semarang, Indonesia

Abstract
The advent of 4.0 technology era, the use of computer technology has pervaded many areas of fields of study included in the field of language learning and testing. Computer as a frequently used technological tool has been widely inspected in the field of language assessment and testing. The current study aimed exploring the implementation of Computer Adaptive Testing for assessing English Proficiency and also analyzing the challenges in its implementation. This study uses qualitative case study which is involving 24 students and the CLIL teachers of International Class Program. Questionnaire, Observation, and Interview were used to gain the data, the data then were analyzed using qualitative theme analysis. The results revealed that: 1) the steps in implementing CAT based English proficiency assessment for international class program covers: preparation, piloting, practicing and evaluating; 2) the challenges that emerge in the implementation of CAT based English proficiency assessment were: the suitability of the teaching material, students' level, and the compatibility of the tools. The current study recommends further research which is focusing more in the evaluation of CAT based English proficiency assessment for CLIL classroom in the worldwide context.

Keyword: Key words: Computer Adaptive testing (CAT), CLIL, English Proficiency Assessment, 4.0 Era.

Topic: Instructional technology and application for education
LEARNING MATH WITH HAHSLM 472319 METHOD AS ALLAH CONCEPT TO CREATE UNIVERSE

RM Aziz
UIN Jakarta, Hahslm Study

Abstract
The research aims to found the consistency in the different phenomenon of mathematic such as triangular numbers and creation of universe. The triangular numbers has represented of the equation number as 72319. And also God equation has the same digital number of 72319 to create the universe. The research data from Quran and real factor in universe. The methodology uses system approach based on prophecies development and empirical values. The approach of the study is descriptive analysis with comparative advantages. Triangular numbers have group of 319, 913, 616 to form reflexivity equation. Allah math has algorythm of 725 to create the universe as Quran Al-Anbiya 21.30. These 2 (two) method have same digital numbers of 472319 that explained in the Quran Al-Hijr 15.87. Conclusions are both approach has consistency numbers of 472319 or Hahslm equation. This Hahslm equation consist of Islam as the integral parts of Universe Guidance Theory (UGT).

Keyword: hahslm, 472319, triangular number, universe, god equation
Topic: Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
DIGGING STUDENTS’ UNDERSTANDING ON CORAL REEFS: THE FORGOTTEN LOCAL POTENTIAL

Akhmad Sukri1*, Septiana Dwi Utami2, Zurlina3, Gito Hadiprayitno4, Marheny Lukitsari5

1,2Department of Biology Education, IKIP Mataram, Indonesia 3Student of Biology Education Department, IKIP Mataram, Indonesia 4Department of Biology Education, Universitas Mataram, Indonesia 5Department of Biology, UNIPMA, Indonesia *corresponding

Abstract
One of the main resources possessed by West Nusa Tenggara Province is a coral reef ecosystem. The introduction of coral reef ecosystems needs to be given to students so that they understand and participate in preserving the local potential. The purpose of this study was to analyze the understanding of students’ concepts about coral reefs through the implementation of coral reef comic media in learning. This study was a quasi-experimental study that adopted the separate sample pretest-posttest design. The subjects in the study were junior high school students taken from two different districts in West Nusa Tenggara, i.e. SMPN 2 Batukliang, Central Lombok and SMPN 2 Gangga, North Lombok. Schools are taken randomly with a total number of 48 students. Students’ understanding concepts collected through test then was analyzed by using the N-Gain formula in order to determine the impact of the implementation of comic media before and after treatment in each school, and the free sample t-test was to see the differences in students’ conceptual understanding between the observation schools. The results showed that (1) there were differences in N-Gain scores for each school, i.e. SMPN 2 Gangga had a score of 0.64, while SMPN 2 Batukliang was 0.46, (2) there were differences in the value of students' understanding of coral reefs in SMPN 2 Gangga and SMPN 2 Batukliang (p = 0.016)
The Implementation of Multiple Media in Improving Reading Comprehension Skill in the University Students

Eko Aprianto | Dwi Fita Heriyawati
State University of Surabaya | STIKI Malang | Kanjuruhan University of Malang

Abstract
Most nations in the globe have recognized English as an international language. Consequently, English must be used in internationally both spoken and written communication. The people who live in the country which English to be the foreign language or even the second language has to learn it. In order, they can communicate with all people in the world globally. The teaching English as a foreign language in Indonesia has the objective to improve students' capacity in acquiring the language itself. Furthermore, the students have to master the four language skills such as reading, listening, speaking and writing. Among four language skills; reading one of the skill to be learned because by understanding the text, it can help the students to comprehend the knowledge of science and technology. Reading is also the "gate" to acquire science and technology. Through reading the text, the students will gain a lot of knowledge related to their field. Regarding the importance of the students in comprehension of the text, then, the objective of this paper is to give the contribution idea to improve the students reading comprehension skills for university students by using multiple media and creating the effective teaching-learning process in the higher education institutions.

Keyword: Reading comprehension, multiple media, effective education

Topic: Innovations in instructional training and education
PROBLEM BASED LEARNING ON NON EUCLIDEAN GEOMETRY MATTER FOR PRACTICING CRITICAL AND CREATIVE THINKING

Fatriya Adamura
Universitas PGRI Madiun

Abstract
Development and experiment research have been done because there is no learning tools of problem based learning. Development research was done by using modified 4-D model that consists of define, design, and develop. Research subject is student in Mathematics Education programme of IKIP PGRI Madiun even semester 2018/201 at Geometry System learning. Research instruments were validation sheet, reading validation sheet, learning management observation by lecturer sheet, student activity observation sheet, test, and questionnaire. Analysis is done for data that is gotten by research instrument. Summary of the research is good problem based learning tools was developed using modified 4D model. It because validator said that learning tools valid and fulfill criteria: (1) student activity was effective, (2) lecturer capability for learning management was good, (3) test was sensitive, valid, and reliable, (4) student response was positive. Problem based learning tools that is gotten were lesson plan, student worksheet, and test. Problem based learning tools can be used for teaching Non Euclidean Geometry matter because (1) classical student learning completeness fulfilled, (2) student activity in the learning activity fulfill ideal time, (3) lecturer capability in the learning management was good, (4) student response for learning tools and activity was positive.

Keyword: Problem based learning; Non Euclidean Geometry Matter; Critical and Creative Thinking

Topic: Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
DEVELOPING EFL CRITICAL READING SYLLABUS AND MATERIALS FOR STUDENTS OF THE ENGLISH DEPARTMENT -IKIP MATARAM

Fathurrahman Imran & Heri Hidayatullah

IKIP MATARAM

Abstract
The demand of a new model of syllabus and materials were required by the launching of KKNI-based Curriculum in Indonesia particularly at the English department of FPBS-IKIP Mataram. Due to, the students’ needs and learning characteristic became the purpose of this current research. A qualitative research had been conducted to find out the data needed by which two kinds of questionnaires were administered. The data obtained from the instruments were analyzed qualitatively (Likert scale). From 132 respondents, the results dealt with the learning characteristics showed that the audio was 19.69%, the visual was 50.75%, and khinesthetics was 29.54%. In relation to the students’ needs, there were four aspects to be considered 1) necessities in which most of the students’ topic interest was about education (72%), culture (63%), and social life (45%). In adition, the whole critical reading sub-skills had to be covered; 2) weaknesses in which the students reading ability were categorized into good but their current critical reading skills was not good because of some obstacles; 3) the teaching critical reading objectives were divided into two namely external and internal sub-skills in which the students expected to have it unless grammar mastery; and 4) classroom activities in which the respondents tended to see teachers as all roles but Class controllers. Meanwhile, the students’ role as all roles but as knowledge receivers. The critical reading tasks were not loved to be done only in large group (11%). Thus, it could be concluded that the students needed critical reading syllabus and materials that covered the whole objectives and three topics interest with the settled teachers and students’ role.

Keyword :KKNI, critical reading, syllabus, material
Topic :Instructional technology and application for education
Evaluating of students logical thinking ability: TPACK model as a physics learning strategy to improve students logical thinking ability

Ahmad Furqon Muzaky, Widha Sunarno, Harjana
Pascasarjana Universitas Sebelas Maret

Abstract
Physics has the character of logical thinking. The use of technology in physics learning encounters the problem. The purpose of this study is to evaluate student logical thinking ability and determine physics learning strategy to improve students logical thinking ability. The subjects of this study were 53 Islamic boarding school students in Ponorogo. The research approach was used mix method. Instrument test research was used by giving Tests of Logical Thinking (TOLT) which adopted by Lawson. Instrument tes contain of 10 questions depict probabilistic reasoning, controlling variable, proportional reasoning, correlational reasoning, and combinatorial reasoning. The results show that the average students logical thinking ability occupy a level of concrete thinking with a score of 1,43. This finding describes the logical thinking ability was still being the lowest level. Therefore, the alternative learning such as integrating with technology is necessary to improve logical thinking ability of students. Integrating learning with technology can be done by TPACK model.

Keyword
: Logical Thinking, TPACK Model

Topic
: Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
Workshop Multimedia Based Learning for Teachers Basic Level Education

Ghulam Asrofi Buntoro, Indah Puji Astuti, Dwiyono Ariyadi

Universitas Muhammadiyah Ponorogo

Abstract
Education is one aspect of the needs that cannot be separated from human life. Even today education can be said to be the main human need. Formal education in Indonesia starts from the childhood level or is often called TK. To educate children, more interesting methods and media are needed to foster early talent and interest in students. In this case, kindergarten teachers are expected to maximize their communication skills and creativity in preparing teaching. In the era of all use of technology as it is today, all aspects are expected to be able to keep up with technological advances that have increased rapidly from year to year, including kindergarten teachers. Of the many kindergarten teachers present, there are still those who have not mastered the computer. However, with the holding of this training, kindergarten teachers slowly became masters of computers so that they were more creative and innovative in utilizing ICTs to create learning media especially those based on multimedia.

Keyword :service, workshop, learning media, multimedia, kindergarten
Topic :Innovations in instructional training and education
Developing a Prototype Handout Literature-Based Instruction for Essay Writing Course

Lestari setyowati ; Sony Sukmawan

STKIP PGRI Pasuruan; Faculty of Cultural Studies, Universitas Brawijaya Malang

Abstract
The inclusion of literature for language teaching is not something new. Nowadays, the use of literature is becoming quite common for teaching language skills. The purpose of this study is to develop a prototype handout by using literature-based instruction for essay writing course in STKIP PGRI Pasuruan. The research used Gall, Borg, & Gall research and development procedure with some adaptations. The instruments used in the study were questionnaires, interview, and tests. The prototype was tried out and tested to the students who joined essay writing class in the academic year 2018-2019. The students' essays were analyzed by using Jacobs ESL Composition profile covering five elements, namely content, organization, vocabulary, language and mechanics. The result of the study shows that the prototype was proven to be adequately successful to be used for essay writing course. The use of literature for teaching writing give benefits for the students, not only in terms of their writing skills, but also sharpen their critical thinking ability.

Keyword : essay, handout, literature-based instruction, writing
Topic : Innovations in instructional training and education
[GS.AB-30]

Development of Integrated Augmented Reality Module to Improve the High Order Thinking Skill of Physics Vocational High School Grade X

P Purwandari, Adi Purwito

Physics Education, Faculty of Teacher Training, PGRI Madiun University

Abstract
This study aims: 1) Develop an integrated Augmented Reality learning module. 2) Knowing the quality of learning modules that are integrated Augmented Reality based on expert material experts, media experts, and respondents. 3) Knowing the High Order Thinking Skills in the Vibration and Wave material in grade 10 Multimedia Cendekia Madiun Vocational School. This study uses the ADDIE (Analysis, Design, Development, Implementation, Evaluation). The product developed is an integrated module of Augmented Reality on the subject of vibration and waves. This integrated Augmented Reality Module has gone through the stage of validation test with an average percentage of achievement of 77,7% according to the material expert with a decent category, 72,5% according to expert learning media. The results of the trial of 20 students of Grade X Vocational School showed a percentage of achievement of 31%. From the results of this study, it can be concluded that this integrated Augmented Reality learning module meets the requirements with good quality and is worthy of being used as a supporting module in learning.

Keyword: Module, Augmented Reality, High Order Thinking Skills
Topic: Augmented Reality for Education
GOOD CHARACTER IMPROVEMENT OF MILLENIAL GENERATION IN COMMUNITY ERA 5.0 THROUGH ISLAMIC CHARACTER EDUCATION

Siti Muhayati
Universitas PGRI Madiun

Abstract
GOOD CHARACTER IMPROVEMENT OF MILLENIAL GENERATION IN COMMUNITY ERA 5.0 THROUGH ISLAMIC CHARACTER EDUCATION Siti Muhayati University of PGRI Madiun

Abstract The purpose of this article is to find out the ways in which Islamic character education improves the good character of millennial generation in the era of society 5.0. To achieve this goal, the authors of the literature study or library with the title GOOD CHARACTER IMPROVEMENT OF MILLENIAL GENERATION IN COMMUNITY ERA 5.0 THROUGH ISLAMIC CHARACTER EDUCATION. Millennials as citizens of the Republic of Indonesia in addition to gods must also have good character in anticipation of being citizens of the community 5.0. in order to be tough in living life and detecting problems and being able to solve problems without harming themselves and others in the society 5.0 therefore they must get Islamic Character Education, because Islam is a complete character teaching material to improve their character with different characteristics from previous generation. With their characteristics worry if they are not tough to live in the era of society 5.0. The application of Character Education must go through several stages so that the millennial character is resilient to live in the era of society 5.0. From this description it can be concluded that millennial generation in the era of society 5.0 is obliged to obtain good character so that they are tough to face or live in the era of society through Islamic Character Education

Keyword : Karakter, Generasi Millenial, Masyarakat Millenial 5.0, Pendidikan Karakter Islam

Topic : Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
Reconsidering our textbooks' concept about sun's gravitational force: A comparison to quasar

Bertha Wikara, Sutarno, Suranto, Sajidan
Sebelas Maret University

Abstract
A quasar consists of gaseous matter surrounds supermassive black hole. The black hole generates an enormous gravitational force that binds galaxies around. Though on smaller scale, our sun also has strong gravitational force. However, the gravitational force is believed merely comes from sun’s huge mass instead of an existed black hole inside like quasar. Conversely, this paper confirms that the conviction needs to be reviewed. The particles shift postulate (which was obtained through Heisenberg’s uncertainty and wave-particle duality interpretation) and thermal expansion principle denoted that celestial bodies’ gravitational forces depend on their bodies’ temperatures. The hotter their bodies, the weaker their gravitational forces. Hence, sun must have weaker gravitational force compared to planets around it because sun is hotter than them, though it has a huge mass. The planets attract sun by their stronger gravitational forces, while sun itself, considering its endurance from being disunited caused by nuclear fusion and collision among hot molecules, is suspected has immense gravitational force at the core that attracts its body inward. Therefore, sun’s body is attracted inward and outward, yield a binding that creates balance among celestial bodies of our solar system. According to the postulate and principle before, the immense gravitational force inside sun can only be generated by an extremely cold body, allegedly a black hole. As a consequence, we now describe our sun’s structure as a black hole surrounded by gaseous matter, a characteristic that also possessed by quasars.

Keyword: sun, quasar, particles shift postulate, thermal expansion principle, gravitational force

Topic: Innovations in instructional training and education
A Syllabus Design to Enhance Vocabulary and Reading Skills in Computer Assisted Language Learning

Laily Nur Affini, Ajeng Setyorini, Dias Andris Susanto

Universitas PGRI Semarang

Abstract

This article discusses a syllabus design for a subject called Computer Assisted Language Learning (CALL). The syllabus aimed to enhance students’ ability in constructing vocabulary in reading online authentic materials. The aim could be reached by implementing the syllabus to the process of learning in CALL. The author used two websites as the main tools and sources of online reading materials and vocabulary practice. The adaptation of using this technology was expected to meet the course objectives and to meet the demands of the syllabus. This study implemented descriptive qualitative research with two classes of students in the first semester as the participants. Data collection was conducted using questionnaire as the instrument in the odd semester of 2018. The findings show that by reading the texts, students gained new knowledge and updated information. They also found that by practicing the vocabulary exercise, it could increase their brain power in memorizing new vocabulary and know how to use the technology to support their learning.

Keyword:
CALL, Syllabus Design, Descriptive Research, Vocabulary, Reading

Topic:
Computer-based learning
Application of the SETS Approach in Storytelling Learning for Teachers of PAUD ANANDA Jepara

Azzah Nayla, Zamtrio Purbo, Ambarini Asriningsari

Universitas PGRI Semarang

Abstract
The purpose of this study is to describe the application of the SETS approach to storytelling learning for PAUD ANANDA teachers. This research use descriptive qualitative approach. This qualitative descriptive study was conducted through the observation and application of the SETS approach to storytelling learning for PAUD ANAND teachers. The results of the study are descriptions of the application of the SETS approach to storytelling learning for PAUD ANANDA teachers. The implementation of learning as an application that applies the SETS approach to storytelling is very helpful in the teaching and learning process, especially when the teacher is storytelling. The application of the SETS approach to storytelling learning is appropriate because it can grow the interest of teachers to express ideas which are then poured into storytelling.

Keyword: SETS, Storytelling Learning, Teachers of ANANDA PAUD Jepara.

Topic: Design and implementation of technology-rich learning environment
Teaching-Learning of Phosphor-based LEDs Using Science, Environment, Technology and Society (SETS) Approach

Mega Novita1, Duwi Nuvitalia2, Sri Suciat3, Nur Cholifah4

1Faculty of Engineering and Informatics, Universitas PGRI Semarang, Jl. Sidodadi-Timur No.24 Semarang, Central Java 50232, Indonesia 2Faculty of Mathematics, Natural Science and Information Technology Education, Universitas PGRI Semarang, Jl. Sidodadi-Ti

Abstract
In order to face the industry 4.0, Indonesia uses the so called K-13 curriculum which prioritizes in student’s character building based on local wisdom. Therefore, teachers have responsibility to continuously improve the teaching-learning method along with the rapid technological development. Up to recently, there are many teaching-learning approaches has been introduced such as science, environment, technology, and society (SETS). It is one teaching-learning approach that emphasizes in the connection between the real event in our everyday life with science, environment, technology, and social life. Phosphor-based (Light Emitting Diode) LED is one of the current increasing attention topic in the lighting technologies which plays a very important role as general lighting source. Therefore, it is important to introduce this technology from the earliest stage of education. This paper will describe the teaching-learning method of the current technology, phosphor-based LED, using SETS approach in K-13 curriculum.

Keyword: Indonesia, K-13, Kurtilas, SETS, LED
Topic: Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
THE IMPLEMENTATION OF INOVATIVE LEARNING MODELS AND BASED HOTs
SCIENTIFIC APROACH ON LESSON PLAN OF INDONESIAN LANGUAGE AT SCHOOLS

V. Teguh Suharto; Asri Musandi Waraulia; Tuti Hermayani

1) Indonesian Language Education Departement, Faculty of Teacher Training and Education, Universitas PGRI Madiun, Indonesia 2) Madiun Junior High School 04

Abstract
It is disruption situation at school recently. Disruption is the real challenges in the era of 4.0 industrial revolution. It is a difficult situation for students since it is necessary to give them new insights in the framework of scientific approach such as thinking Critically, Creativity, Collaboration (team work ability), and the ability of Communication (4C). Those are considered to be fruitful to overcome problems in their future. Therefore, teachers should be able to apply innovative learning models hopefully.

Keyword: Implementation, Inovatif Models And Scientific, Based HOTs

Topic: Innovations in instructional training and education
Numerical Study the Influence of Radius Stack on the Low Heating Temperature and Efficiency Thermoacoustic Engine Type Traveling Wave

S W Utami, I Farikhah, N Khoiri, S Patonah, U Kultsum, S Suciati

Universitas PGRI Semarang

Abstract
Thermoacoustic is one of the technological sciences that utilizes thermodynamics and waves. The thermoacoustic device is divided into two, namely the thermoacoustic engine that converts heat energy into acoustic waves, and the heat pump used to pump heat from low temperature reservoirs to higher temperatures by utilizing acoustic waves. This study examines numerically the effect of stack radius on efficiency and the value of low heating temperature of thermoacoustic engine. This study uses the fortran application with two codes, the first coding to get the value of stability limit, one of which is a low heating temperature. And to get the efficiency value use the second code, which one of the result is the coding to get the value of coefficient of performance. As a result, the highest level of efficiency is when the stack radius has a size of 0.07 mm which reaches 57% while the lowest heating temperature value is reached when the stack has a radius of 0.12 mm which is 124 °C. So from this result, it can be seen that there is an influence of stack radius on the efficiency and low heating temperature of the thermoacoustic engine.

Keyword
Low Heating Temperature, Efficiency, Thermoacoustic

Topic
Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
Enhancing Biology-Critical Thinking Skill Student through CIRC-Based Scientific Approach (Cirsa)

Rizhal Hendi Ristanto, Refirman Djamahar, Erna Heryanti

Biology Education, Universitas Negeri Jakarta

Abstract
Critical thinking skills are referred to as one of the 21st-century skills. These skills should be empowered through Biology learning. This study aims to analyze the improvement of biology-critical thinking skills in students who are taught through the CIRC learning model based on the scientific approach (Cirsa). Critical thinking skills are measured by tests developed by researchers and validated by theoretical biologists. The instrument includes indicators of critical thinking skills such as formulating problems, giving arguments, making deductions, conducting inductions, conducting evaluations, and deciding and implementing. This study used a quasi-experimental method with a pretest-posttest non-equivalent control group design. This study involved 160 students (M = 95, F = 65) of 8th grade of a Madrasah Tsanawiyah School in Bogor. The findings of this study show that students who are taught by Cirsa have higher Biology-critical thinking skills than conventional learning. In conclusion, Cirsa learning was recommended to develop or enhance students' critical thinking skills related to biological concepts.

Keyword
:Biology, circ, cirsa, critical thinking, scientific approach.

Topic
:Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
STEM in English Language Teaching at High Schools in Central Java Indonesia: Opportunities and Challenges

Dias Andris Susanto, Noor Miyono, Laily Nur Affini

Universitas PGRI Semarang

Abstract

STEM as an educational enterprise has grown in importance during the past 10 years, particularly in the USA, UK, and other Anglo-Saxon countries (Banks & Barlex, 2014). The problem of this study is that what are the opportunities and challenges of implementing STEM in English language teaching at high schools in central java? The research design was a qualitative study using a sheet of structured interview which was distributed to teachers around at district area like; Pati, Semarang, Demak, Jepara, and Ungaran. There were 13 teachers who collected back the instrument and giving the data through their empirical involvement. The participants were the teachers from 6 state high schools and 7 private high schools. In collecting the data, the writers send the questions through email to the group of teachers’ organization and ask them to participate by answering it. The results are; the opportunities of using STEM that is teachers opportune to apply; 1) social media as a tool in teaching media, 2) vlog in supporting a topic of ‘describing a person/a thing’, 3) direct observation onto the nature, 4) short video in conversation, 5) elaborating some texts genres. On the other hand, there are some challenges like; teachers are facing; 1) less skill in using technology, 2) less facility at schools, 3) no socialization about STEM, 4) less teaching media used, 5) less motivation to grow. Writers also declare to recommend teachers to elevate and upgrade their skill in the usage of technology, collaborating nature as the teaching and

Keyword: STEM, English Language Teaching, Opportunities and Challenges

Topic: Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
CHILDREN'S SPORTS IDENTIFICATION GUIDE BASED ON TECHNOLOGY (SPORTS SEARCH)

Abdul Malik, Sunardi, Deny Try Ardianto

Universitas Sebelas Maret Surakarta

Abstract

The problematic that always in habit optimization achievements in sports one of them is located on the difficulty to find talented young athletes. The talent itself is one of the supporting factor that are really supportive and needed in the achievement of sport. Currently, the development of sport especially in Colomadu, Karanganyar less well. It happens in primary school, who be the less well in district level championship. The steps which need to be taken by the sport teacher, coach and trainer, include the need for a talent guide to find seeds athletes potentially and talented in sports. Therefore, the teachers, coach and trainer need to seek the right steps to find seed talented athlete and then be training. One of form or model pilotage talent who needed in identifying talent on students, that is using sport search model. This study attempts to produce a media to help sport teachers and trainer to find talented athletes in the area. Method in this study uses R&D method. Instrument that used is interview, questionnaire, and judgment. Collecting data methods that is done in this study are validity that is taken by validator, effectiveness that is taken by test and student’s respond to student’s guide identification of talented sport media. The result shows that the average of validity is 84%. The media effectiveness of the test result of talented student. Practicality media is taken by validator’s judgment with validity 90%.

Keyword: Media, Sport talented identification, Sport Search

Topic: Instructional technology and application for education
Novice and Experienced Mathematics Teachers’ Decision Making Process in Designing Math Problem

Wasilatul Murtafiah, Cholis Sa’dijah, Tjang Daniel Chandra, Susiswo, Moh. Zayyadi

Mathematics Education Study Program, Faculty of Teacher Training and Education Universitas PGRI Madiun, Jalan Setiabudi No. 85 Madiun Indonesia Mathematics Education Study Program, Faculty of Mathematics and Science Universitas Negeri Malang, Jalan Sem

Abstract
This study aims to explore the decision-making process of novice and experienced teachers in designing mathematics problems. Data collection of decision-making process is done by interview based on the results of observations of problems designed by the teacher and the framework that includes the stage of generating ideas, clarifying ideas and assessing the reasonableness of ideas about mathematics problems. The findings show that in generating ideas, novice teachers are still less creative than experienced teachers. In clarifying ideas, experienced teachers always associate with real contexts that are close to students, while novice teachers make problems with contexts that are still less close to students. When assessing the reasonableness of ideas, novice and experienced teachers alike have the confidence that the problems are designed according to students' abilities which are supported by experience for experienced teachers.

Keyword : Decision making, Math Problem
Topic : Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
WRITTEN FEEDBACK ON THESIS DRAFTS: LECTURERS’ AND STUDENTS’ VOICE

Lailatul Musyarofah, J. Priyanto Widodo, Kani Sullam Taufik, Burhan Fadil Pratama

STKIP PGRI SIDOARJO

Abstract
Written feedback in thesis writing is considered as a main communication tunnel between lecturers and students. It functions more than just how to correct and revise but also how a relationship is built to achieve the same goal: a good thesis writing. This paper aims at exploring lecturers’ and students’ perception towards written feedback provision on students’ thesis drafts. Four lecturers and four students were invited to a Focus Group Discussion (FGD) to discuss their perception towards written feedback provided on thesis drafts. The result of the FGD shows that lecturers have different opinion compared to students in some ways but in some other ways both have same opinion. The finding suggested the thesis supervision especially in written feedback is provided more obviously and the next researchers are hoped to conduct similar topic by using survey so the finding is more reliable and can be generalized to cope the problem between lecturer and students in the process of thesis writing.

Keyword
: Written feedback, thesis draft, lecturers’ and students’ voice

Topic
: Innovations in instructional training and education
Development of videoscribe-based high school physics learning media

D L Saraswati, Y Dinihari, A Nurrahmah, T A Sari, E Wiyanti

Universitas Indraprasta PGRI

Abstract
On the subject of geometry optics, pictures that can facilitate students in understanding the material are needed. Therefore, learning media that can show animations or pictures that can be understood by students are needed. One of the learning media that can be used is videoscribe. Videoscribe application can show animations and writings in the form of videos. The stages of this product development are carried out by six stages, such as, concept, design, material collecting, assembly, testing, and distribution. The data collection technique used was product evaluation questionnaire. The product evaluation questionnaire is used to assess development products by material experts and media experts. On average, the result of the validation test by material experts obtained a score of 80.11%, in which it is feasible in terms of material. Whereas, the score by media experts was 84.16%, in which it is also feasible in terms of learning media. Based on the results of the feasibility test conducted, Videoscribe-based high school physics learning media on the subject of geometry optics has an average value of 82.14% with a very good interpretation. So that this product can be used in a field trial for users to get a product that viable as an alternative learning media in the classroom.

Keyword : Videoscribe, research and development, media
Topic : Innovations in instructional training and education
The effect of basic mathematical abilities on learning outcomes of physics education students

D L Saraswati, I Lestari, Seruni, Y Andinny, N Hikmah

Universitas Indraprasta PGRI

Abstract
Research has been conducted to determine the effect of basic mathematical abilities on learning outcomes of physics education students in the Measurement Method course. This is done based on the observations of researchers in the learning process of the Measurement Method. There are significant differences in the teaching and learning process. Students with weak basic mathematical abilities tend to be difficult to understand every materials in the lesson. The population of this research is fourth semester students of Physics Education academic year 2018/2019. This research is an experimental research. The method of data collection in this research was taken through basic mathematical abilities test and student learning outcomes test. Data were analysis using regression analysis. From the results of this research, it can be concluded that there is an influence of basic mathematical abilities on student learning outcomes in the Measurement Method course with a magnitude of influence of 6.7%. It's means that the success of student learning in the lecture Measurement Method is related to students' basic mathematical abilities. So it can be said that the final grades of students in the Measurement Method lesson is influenced by the basic mathematics ability possessed by the student.

Keyword : Basic mathematical abilities, physics, learning outcomes, mathematics
Topic : Augmented Reality for Education
Development of Mathematical Literacy Problems to Empower Students’ Representation

L Lestariningsih*1, E Nurhayati1, TAB Susilo1, C Cicinidia1, M Lutfianto2

1STKIP PGRI Sidoarjo, Sidoarjo, Indonesia 2STKIP Al Hikmah Surabaya, Surabaya, Indonesia

Abstract
Representation is the main skill needed by someone in the process of solving problems, especially mathematical literacy problems. Thus this paper aimed to describe the process and results of developing mathematical literacy problems that are valid, practical, and have the potential effect on students’ representation. In developing problems, researchers used design research with development study type. The problems was developed with a formative evaluation consisting of self evaluation, one to one, expert review, small group, and field test involving 2 experts from mathematical literacy experts, and 36 first-year students. The results of the study showed the problems developed to meet valid and practical criteria based on one to one results analysis, expert reviews, and small group. Furthermore, the problems developed also have potential effects based on a field test analysis that showed students were empowered in generating representations in solving problems.

Keyword : development, mathematical literacy problems, students, representation
Topic : Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
2013 CURRICULUM “UNITY BONDING IN THE BHINEKA” THROUGH STUDENTS CHARACTER EDUCATION IMPLEMENTATION


STKIP PGRI SIDOARJO

Abstract
As far as the society civilization developed, education has to be able to answer the future challenges. Indonesia’s education is obligated to face the 4.0 industrial revolution era. There are three aspects in the education institution that must be balanced-undergo. Those are scholars and professionals. They must be able to run and co-operate the education system maximally. Indonesia is consisted of various race and religion. If those differences could not be navigated, they would be obstacles in the education system implementation. Students will be the main role model as the future generation successor. Also, students have to maintain the Bhineka through character education to face the future challenges. This paper is aimed to create the student’s tolerance and cooperation through education character system based on 2013 Curriculum. This curriculum is focusing on learning system that navigated to character education strengthening. Those character educations are nationalism behavior development, integrity, independent, mutual assistance and religious. Those are also expected to implement that could be as an effort to maintain the Bhineka.

Keyword: Bhineka, 2013 Curriculum, Character Education, Students

Topic: Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
Neural Networks and Behaviour Based Control for Education Botanical Robot Navigation

Aan Burhanudin, Slamet Supriyadi, Muchammad Malik

Universitas PGRI Semarang

Abstract
The development of robots began when the military needed it as war equipment, and then it was used by some industries to develop production until now widely used for education and agriculture. Educational robots are usually more universal and simpler than industrial or military robots because robots for education are made only for simulations or prototypes. In this study, the authors surveyed prototypes of Educational botany robots, namely robots used to distinguish fruit maturity. In this journal, the behaviour-based control (BBC) algorithm will continue implemented into mobile robots. The movement of the mobile robot prepared in advance, and then actually the mobile robot is wheeled compared to the desired path. Besides, both kinematic and dynamic smelling mobile robots are derived and considered. In this study, only focused on mobile robots three-wheel differential drive, which will explore in a circular and straight path. In this journal, it can be found that image processing techniques can be used to determine the maturity of watermelons which are shown in different average values in each image obtained by the camera. The best models are generated by layer 32 hidden with an accuracy value of 87% at the training dataset level 60:10:30. The Behaviour Based Control Method has directional movements. But there was an error in each test so that I couldn't take the watermelon correctly. The error rate reaches 25% from 40 tests or about ten failures in the form of deviating from the object point.

Keyword: Neural Networks, Behaviour Base Control, Robot Botany

Topic: Robotic and game for Instructional Purpose
DIGITAL LITERACY FOR CHILDREN BASED ON STEAM IN FAMILY EDUCATION

Iin Purnamasari, Ismatul Khasanah, Sri Wahyuni

Universitas PGRI Semarang

Abstract
Technology is part of our life and it cannot be separated from our daily life. Consciously or not this will affect the behavior of each individual. Rapid progress in technology makes the children of the current generation increasingly grow into smarter and more critical generation. Fortunately, most parents often use this sophisticated technology as a means to make the children stay busy or as a means for negotiating with them. So, it is necessary to apply an appropriate method. STEAM which stands for Science, Technology, Engineering, Art, and Mathematics is a very important method in child development. This method emphasizes on active learning, and it stimulates children to solve problems. Through STEAM children are trained to focus on solutions, to build logical and systematic ways of thinking and to improve their critical thinking. All of them are intended to prepare the children to build their sense of competitiveness and to prepare them for career opportunities in the technical and creative fields in the future. Family as one of the smallest units in society can be the main agent in reviving digital literacy. Therefore, family also plays an important role for the success of the program.

Keyword: Digital, literacy, STEAM, family, education

Topic: Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
Technology Used in Teaching Learning Process of Teacher Candidates of English Study Program, Universitas PGRI Semarang

Maria Yosephin Widarti Lestari1, Siti Musarokah2, Asyifa Dinar3

Universitas PGRI Semarang

Abstract
The study aims at knowing the use of technology in teaching learning process of teacher candidates of English Study Program of Universitas PGRI Semarang. The subjects of the study are the eight semester students which are teacher candidates of the English Study Program of Universitas PGRI Semarang in the academic year 2018/2019. The instrument used in the study is questionnaire. The techniques used in the study are sharing the questionnaire to the eight semester students through Whatsapp to know what kinds of technology used by them are and interview to know how their perception of the use of technology in teaching learning process is. The qualitative data are analyzed by reducing the data, classifying the data and drawing conclusion. The result of the study shows that teacher candidates tend to use same kinds of technology in teaching learning process, and they have an opinion that technology is really important for the teachers and for students.

Keyword : teacher candidates, technology, teaching English
Topic : Instructional technology and application for education
HOTS Android-Based Student Worksheets to Practice Creative Thinking Ability of Vocational School Students

Agung Budi Prastyo, Sardulo Gembong, Titin Masfingatin, Swasti Maharani

Universitas PGRI Madiun

Abstract
This study aims to describe the development of an Android-based HOTS Student Worksheet to train the creative thinking skills of vocational students. The type of research used is Research and Development (R & D) using the ADDIE model which consists of five stages: 1) analyze, 2) design, 3) development, 4) implementation, and 5) evaluation. The research subjects were class XI students in Online and Marketing Business (BDP) majoring in SMK Negeri 1 Sekar Bojonegoro, totaling 33 students. The research instruments used were learning media validation sheets, test questions, and student response questionnaires. The results of this study are HOTS-based Android student worksheet learning media that meet very valid criteria with an average of 90.22%, practically with an average student response questionnaire of 80.30% and effective to train creative thinking skills of class XI students of linear program material.

Keyword: HOTS, android, creative thinking
Topic: Innovations in instructional training and education
DEVELOPMENT OF MOBILE LEARNING MEDIA BASED ANDROID TO SUPPORT STUDENTS UNDERSTANDING

Rendra Nur Cahya, Edy Suprapto, Restu Lusiana, Sanusi

Universitas PGRI Madiun

Abstract
Technological developments have an impact on the education sector. This study aims to develop and produce android-based learning media on the subject of quadratic equations and knowing the ability to understand material concepts. This type of research is Research and Development. The research model used is the ADDIE model which consists of 5 steps namely (1) analysis (analyze), (2) design (design), (3) development (development), (4) implementation, (5) and evaluation (evaluation). This research was conducted at Jiwan State Vocational High School 2. The subjects in this study were the tenth grade students of Machining Technique. The instruments used were learning implementation plans, media validation sheets, student response questionnaire sheets, and post test questions. The results showed that: (1) M-Learning fulfills the element of validity with the average results obtained from the media validation sheet from media experts amounting to 97.33% and from material experts at 88.33%. (2) M-Learning is able to give a positive influence seen from the results of the post test with a percentage of 92.37% and (3) The response of students after using M-Learning in the main field test shows a percentage of 83.68%, so as to attract students in the process learning.

Keyword : M-Learning; Android; Understanding of Concepts; Quadratic Equations.

Topic : Innovations in instructional training and education
WAYANG REVITALIZATION IN DEVELOPING THE MORAL VALUE OF ELEMENTARY SCHOOL STUDENTS

Lita Erdiana, Rosyidah Umami Octavia, Oktaviani Dewi Susanti, Shierly Novalita Yappi

STKIP PGRI SIDOARJO

Abstract
Wayang has an important role in the social communities’ lives. In the current millennium era, puppets as a nation's cultural heritage are not in demand and are not even recognized by children in elementary school. They prefer other characters like Batman, Cinderella, and a series of other superheroes. The importance of wayang as the cultivation of cultural moral values needs to be revived in the midst of our lives. This Wayang revitalization is done by simplifying folklore without reducing its essence, and developing Wayang as media for teaching to develop national cultural moral values in elementary school students. Previous research was conducted by Ni’mah (2016) that the younger generation of lemah ireng villages has a good response to wayang kulit. The research methods used in this study include the development model, development procedures, and validation tests of Dick and Carey (2001). Data collected through the development of wayang media is in the form of quantitative and qualitative data. Qualitative data was obtained from questionnaires to the subjects of the trial, in the form of responses and suggestions for improvements obtained from interviews, while quantitative data were obtained from questionnaires distributed to subjects of media experts, material experts, and learning experts through a series of field tests. As for knowing the effectiveness of the product in the revitalization of wayang to develop the moral culture of elementary school students using the Wilcoxon test. The Wilcoxon test results are known that revitalizing puppets can develop the moral culture of elementary school students.

Keyword: revitalization, wayang, cultural morals
Topic: Innovations in instructional training and education
THE ADVANTAGES OF DUTCH LANGUAGE ACQUISITION FOR HISTORY EDUCATION STUDENTS

Yudi Prasetyo, A. Fathikul Amin A., Izzatul Fajriyah, Satrio Wibowo, Nuril Fitrianingrum

STKIP PGRI Sidoarjo

Abstract
The role of history lecturer in content and language integrated learning has received little attention, since not every university has lecturer specializing at Dutch language and collaborate into historical sources. This exploratory study aims to gain insight into the perceptions of Dutch language to improve the history of education students comprehension. We applied phenomenology and historical approaches in explaining the findings thoroughly. Results show that teaching Dutch to history education students plays a pivotal role, especially in translating, analyzing the original words, communicating in Dutch. Teaching in Dutch, moreover, enriched their horizon to German as these languages have quite similar grammar rules.

Keyword : Keywords: Dutch, language, history, education
Topic : Innovations in instructional training and education
The Role of Literature to Develop Critical Thinking Skill: A Case Study of Developing Critical Thinking of Low Achievement Students of English as a Foreign Language through Reading Poems

Siti Aisyah, Sulistyaningsih, Yulianto Sabat, Endah Harumi, and Amaliah
STKIP PGRI Sidoarjo

Abstract
Critical thinking is always assumed to deal with the critical reading and critical writing that also involve scientific and serious materials. The critical thinking is also judged as the thinking skill for smart students only due to there are complicated problems involved, namely linguistic, psychological and cognitive problems. For students with such kinds of condition and situation, they need different materials and strategy adjusting to their characteristics to develop their critical thinking skills. This research shows that low achievement students of English as a foreign language (EFL) successfully improve their critical thinking skills after having activities of the poems interpretation and analysis in reading classes. This research also proves that they are aligned in pursuit of critical thinking through reading poems completed with the critical assignments. These lead the students to engage themselves not only in joyful learning activities of reading but also in training their thinking skills. They can perform interpreting and analyzing poems with reasonable point of views. By having descriptive qualitative research for several months, there are crucial factors optimizing the best performance of the low achievement students of EFL in thinking critically, namely well-designed lesson plans, peer-learning activities, and good teacher feed backs.

Keyword: Critical thinking
Topic: Innovations in instructional training and education
Indonesian National Literacy Education: The Real Primary School Program Implementation

Fida Chasanatun, Dwi Setyadi, Dheetyas Glibson Rajindra Azizi, Latifa Dahniar

unipma

Abstract
This research purpose is presenting the real condition of Gerakan Literasi Nasional (GLN) or National Literacy education in Primary Schools. The main arrow is pointed to portray the preparation, going-on activities, the needed intervention moves, and the results. The first and second steps of Educational design research is applied in evaluating the program. There are four sequences of two cycles in accommodating both steps; Plan; Act; Observing; and Reflecting. The participants of this research are 16 fourth graders from Mangge 02 Primary School located in Magetan and 24 ones from 03 Madiun Lor Primary School in Madiun. Both schools are decided as the program had started there but still had to be improved and not yet evaluated. The data are analyzed by triangulation technique. The result showed that this program increase students' learning mastery under 80% degree of worked indicators. The lowest score was 68, the highest score was 88 and the average value, with the degree of worked indicators up to 75% experienced the lowest achievement of learning outcomes in cycle I 69, the highest score 89, and an average value of 81 with classical completeness in the first cycle of 75, in the cycle I have not reached the completeness standard, then make improvements in the second cycle by achieving classical completeness 94%, the highest score is 93, the lowest is 76, and the average score is 86 of the first school. The second place of research reached 79% made improvements in the second cycle by achieving 92% classical completeness.

Keyword :GLS; National Literacy Education, Students reading achievement

Topic :Innovations in instructional training and education
EFFORTS TO IMPROVE CULTURAL LOVE ATTITUDE THROUGH EXTRACURRICULAR ACTIVITIES KARAWITAN IN ELEMENTARY SCHOOL

Endang Sri Maruti, Muti Atul Maskurin

Universitas PGRI Madiun

Abstract
This study aims to improve the attitude of cultural love with Karawitan extracurricular activities to students of SDN 01 Manisrejo, Madiun City. This study is a Classroom Action Research (CAR). The subjects of this study were all students who followed Karawitan's extracurricular strength which amounted to 24 students. Data collection techniques used were observation, questionnaires, and tests. The data analysis technique was carried out in a qualitative descriptive manner. The results show that Karawitan extracurricular activities can enhance students' cultural love attitude. In the first cycle there were only 19 students or 79.2% who could achieve indicators of cultural love attitude. Whereas in the second cycle there was an increase in the number of students who could reach 24 indicators of cultural love attitudes or 100%. In addition, student activity and learning outcomes also increased. In the first cycle, 75% of the number of students had begun to be active and in the second cycle had increased to 87.5% of the number of students already active during the learning process. While for the percentage of learning outcomes in the first cycle there are 75% of the number of students who have reached the indicator and in the second cycle 91.7% of the total students have achieved the expected learning outcomes indicators.

Keyword
: love culture, karawitan

Topic
: Virtual Reality for Education
THE EFFECT OF QUANTUM LEARNING MODEL HELPED AUDIO-VISUAL MEDIA ON STUDENT LEARNING OUTCOMES IN CLASS IV SDN NGUNUT II, KECAMATAN BANDAR, KABUPATEN PACITAN

Gandhi Katon Wibawanti, Liya Atika Anggrasari, Fida Rahamantika H
Universitas PGRI Madiun

Abstract
This study aims to find out the quantum learning model assisted by audio-visual media on the learning outcomes of class IV students in semester 2. This research was conducted at Ngunut II Elementary School in Kec. Bandar, Kab. Pacitan in IVA class consisted of 31 students and IVB class totaling 32 students with a total of 63 students. The research was conducted on mathematics subjects by doing a posttest on kite material and trapezium. The data collection process was done once, namely posttest in the control class and the experimental class. Data were analyzed using a t-test with a significant level of 0.05. The results of the study obtained the results of the t-test with a significant value, namely \( t_{\text{tung}} = 9.699 > t_{\text{table}} = 2.000 \). This shows that there are significant differences in mathematics learning outcomes between students treated with quantum learning models assisted by audio-visual media and students who are not treated or using conventional models in class IV SDN Ngunut II Kec. Bandar Kab. Pacitan 2018/2019. With this, it can be concluded that the quantum learning model assisted by audio-visual media affects the learning outcomes of class IV Ngunut II SDN Kec. Bandar Kab. Pacitan.

Keyword: quantum learning, audio-visual media, learning outcomes.
Topic: Instructional technology and application for education
Implementation Interactive Media Educational Videos for develop Honesty Character

Aprilliya Puspitaningrum1), Sri Budyartati 2), Diyan Marlina 3)

UNIPMA

Abstract
This study aims to find out the Interactive Media of Educational Videos in instilling the character of honesty in third grade students of SDN 01 Pandean, Madiun. This research was conducted in semester II Class III B with a total of 32 students. The total number of class III students is 64 students. The research was conducted with the planning, implementation and completion stages. The study was carried out 4 times, namely to obtain data on interviews with home room III, head of school and students of class III B, observation of home room III and students of class III B and documentation. The validation in this study was carried out by data triangulation by drawing conclusions by comparing interview data, observation, and documentation. The results show that the use of interactive educational video media in instilling the character of student honesty has been well implemented. All scores for each aspect that must be achieved show number 3, which means that it has been done well. In this study, researchers found several findings, namely interactive video educational media can be a source of student knowledge about the character of honesty and interactive media educational videos can overcome the problems of dishonest students when working on individual tasks.

Keyword
Interactive Media Educational Videos, Honesty Character

Topic
Innovations in instructional training and education
[GS.AB-62]

ANALYZING MECHANIC ERRORS OF STUDENTS’ WRITING

Dewi Tryanasari, Sri Lestari, Nur Afiana

UNIPMA

Abstract
ABSTRACT This research is aimed to analyze fourth-grade students’ error in spelling for writing skill. This research is qualitative descriptive research. The subject of this research was fourth-grade students’ elementary school in Sukowiyono 4 academic year 2017/2018. The data is collected through analyzing document related to the error in writing an essay, especially in the spelling of Indonesian language. The triangulation data source is to ensure the validity. Analyzing data interactive model is used. The results of the research proves the error in spelling in the essay of fourth grade students elementary school in Sukowiyono ;4 (1) the total of errors in using punctuation for essay 1 was 85 errors while in essay 2 was 56 errors, (2) the total of errors in spelling for essay 1 was 35 error while in essay 2 was 22 error, (3) the total of capitalization error in essay 1 as 162 error and essay 2 as many as 89 error.

Keyword : language error, spelling error, student essay
Topic : Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
Development of Mind Mapping Pocket Books in Quadrangular Materials to Improve Self Regulated Learning of Grade VII Junior High School Students

Padma Jati Hilmiyah, Ika Krisdiana, Vera Dewi Susanti, Tri Andari

Universitas PGRI Madiun

Abstract
This research is a development research that aims to determine the validity, practicality, effectiveness of learning media using mind mapping pocket books in quadrangular material to improve self regulated learning of class VII students of SMP Negeri 7 Madiun. The type of research used in this study is Research and Development (R&D) with the ADDIE model which consists of five steps, namely: 1) analyze, 2) design, 3) development, 4) implementation, and 5) evaluation. The research subjects consisted of two types, namely the limited test subjects with 6 students from VII-B class and field trial subjects with 32 students from VII-G class. The research instruments used were learning media validation sheets (validity aspects), student response questionnaires (practical aspects), learning outcomes tests (effectiveness aspects), N-gain tests (increased self regulated learning) The results of this study were: 1) Learning media mind mapping pocket books in quadrangular meet high validity criteria with an average value of 88.89%, 2) pocket book learning mind mapping media in quadrangular meet high practicality criteria with an average value of 4.28 in limited trials and 4.21 in field trials, 3) mind mapping pocket book learning media in quadrangular material fulfills the effectiveness criteria percentage of students completing learning by 93.75%, and 4) Pocket book mind mapping learning media on quadrangular material can improve self regulated learning students with the results of the N-Gain average of 70.49

Keyword: Pocket Book, Mind Mapping, Self regulated Learning, and Quadrangle

Topic: Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
QUESTIONING PRIMARY TEACHERS’ PAPER-BASED LEARNING INSTRUCTIONS

Dwi Setyadi, Fida Chasanatun, Supri Wahyudi Utomo, Rhezia Kumala Prilyantika

Universitas PGRI Madiun

Abstract
This research is aimed to share a document-based view of teachers’ learning instructions applied in Madiun. This purpose is declared in answering several questions: (1) Classification of mistakes; (2) Why mistakes taken place; (3) Steps in solution giving from schools. Mixed research methods are used to measure several data sources. The most part of analysing focused activities are on teachers’ documents prepared for the lessons during one semester of 2016/2017 academic year. The data are clarified by interviewing the teachers, teaching-learning experts and stakeholders. The last technique of data finding is giving questionnaires for the research samples (30 teachers from three randomized primary schools in Madiun). The research results are classified into two groups; error and mistake. The error class consists of active-learning misconception, wrong direction in making learning objectives, and having unclear perception in completing part of learning instructions. The mistake consists of incompleting part of learning instructions, misfinger typing, and disconnecting resources of learning materials. The subjects of favoring the error and mistakes here are from the teacher unclearly understanding and mastering of learning instructions itself (34%), their lack of references and laziness (13%), and the rest are from the fact that the copied document provided by books, internet, and teachers’ colleagues. The solution given to the problems so far are from the teachers’ meetings and experts’ monitoring as the teaching-learning improvement and good sustainability.

Keyword: Learning Instructions; mistakes; error.
Topic: Innovations in instructional training and education
THE INFLUENCE OF PERFORMING RESEARCH CULTURE AND WRITING MOTIVATION AND LECTURER COMPETENCE TO COMMITMENT IN DOING RESEARCH AND LECTURER RESEARCH PRODUCTIVITY IN PRIVATE UNIVERSITIES IN EAST JAVA

S Riyanto1; A Sriqueaningsih2; R R Siga3; W Wijianto4

Universitas PGRI Madiun1; STIE Bulungan Tarakan2; SMA Negeri 3 Tarakan3, Universitas Muhamadiyah Ponorogo4

Abstract
The objective of this study was to identify the influence of performing research culture, writing motivation, lecturer competence on commitment to conduct research and productivity of lecturer research in Private Universities in East Java. The results of this study indicated that: the culture of writing had a positive and significant influence on the commitment to conduct research on private universities lecturers in East Java (TStatistics (2,773)>TTable (1,960)). The culture of writing had no influence on the commitment to conduct researchers on private universities lecturers in East Java (TStatistics (1,016))
Integrated STEM Project Based Learning Implementation to Improve Student Science Process Skills

Yoga Budi Bhakti, Irnin Agustina Dwi Astuti, Indica Yona Okyranida, Dwi Aprillia Setia Asih, Giry Marhento, Leonard, Andista Candra Yusro

Universitas Indraprasta PGRI and Universitas PGRI Madiun

Abstract
This research aims to investigate the influence of project-based learning (PjBL) learning that integrates with science, technology, engineering, and Mathematics (STEM) on optical concepts with improved student science process skills. The method of study used is a descriptive method. Data is obtained from a learning observation sheet to determine the skills of the science process developed by students and polls used to capture student responses to learning. The instrument in this study uses a science process skills test in the form of an observation sheet and a subjective test. The science process skills tests used in this study include asking questions, observing, hypothesized, planning experiments, interpretation, and communicating. The Data that has been obtained is then analyzed descriptively. The results of this study show that students have all indicators of the science process skills that belong to the good category (average rating 79.33). Students give a positive response to learning, because they feel more understanding, improving motivation and learning interests.

Keyword: STEM, Project-based Learning, Science Process skills
Topic: Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
Abstract
The G30 S PKI was a controversial material in Indonesia history. The material became a historical debate as a challenge for the teacher in their learning. Historical learning that has been developed in various mass media included social media had created the assumption that history made confusion for teacher and their student. This matter would make poor historical learning. Facing this problem, it was required Transformative Historical learning in the learning process. The Transformative Historical Learning presented a history that brought educative content of awareness to build social values in life. The students were actively involved in building awareness of that value. Historical learning used student-centered roles. The cooperative learning was also needed to improve the student’s activeness in the learning process including exploration act and multimedia items as a facility to support it. Historical learning was directed to active historical thinking that used to build historical awareness in contextual learning and presented general dialogue. Transformative Historical learning provided the content of character education that focused on internalization namely development changes started from behavior that controlled externally to internally. Internalization occurred when someone found its roles as a person at a time and the certain values would also give meaning in their life. The internal motivation was important in Transformative Historical learning. Through it, internalization would be the main value for every individual and also created their character. The controversial materials in the Historical learning, especially about G30 S PKI, could be controlled to historical didactics without ignoring historical academics.

Keyword
: Transformative Historical Learning; Controversial Materials; G30 S PKI

Topic
: Innovations in instructional training and education
The Application of the K-Nearest Neighbors Method as A Recommendation for The Selection of Departments in Higher Education Based on The Results of Multiple Intelligence Tests

N Nuswantari1, Y F Rachman2, P W D Setiawan1, W D Prakoso1

1 Universitas PGRI Madiun, Jl. Setiabudi No.85 Madiun, Indonesia 2 Universitas Amikom Yogyakarta, Jl. Ring Road Utara, Condong Catur, Sleman, Yogyakarta, Indonesia

Abstract
The problem faced by students after graduating from High School or Vocational High School is the difficulty in deciding whether to work immediately or going to college. The next problem for students who will enter college is to choose which major study based on their type of intelligence. Determination of Departments that are inappropriate often makes students unable to do well in lectures. The problem of this study is whether the selection of Departments for the University of PGRI Madiun in 2019 is in accordance with the type of intelligence or not. The purpose of this study is to recommend the selection of Departments at the University of PGRI Madiun students based on Multiple Intelligence test results. This research is quantitative research and data collection is done qualitatively. The research subjects were students of PGRI Madiun University in 2019. The sampling technique used purposive sampling with a sample of 297 students from 4 Faculties and 22 Departments. The technique of collecting data using the multiple intelligence test questionnaire. The research data were analyzed using the K-Nearest Neighbors method. The results of the study showed that the suitability of the choice of Departments of the University of PGRI Madiun students based on multiple Intelligence test for the Faculty of Health and Science had the highest accuracy of 86.36%, Faculty of Teacher Training and Education (Science) 63.04%, Faculty of Teacher Training and Education (Social) 32.28%, Faculty of Teacher Training and Education (Language) 58.62%, Faculty of Technology 56.67%, Faculty of Economics and Business

Keyword : K-Nearest Neighbors, Recommendations, Multiple Intelligence
Topic : Instructional technology and application for education
The value of character education in folklore on textbooks for elementary school students

A B Santoso, E Winarsih, dan D R Soleh
Universitas PGRI Madiun

Abstract
The purpose of this study is to describe and explain the values of character education in folklore in Indonesian language textbooks for fifth grade of SD / MI. The research method used is descriptive qualitative. Sources of data in this study are folklore in the textbooks of fifth grade of elementary school / MI. The data analysis technique used in this study is content analysis. The folklore data analyzed are “Kesetiaan Bujang Trindil”, “Malin Kundang”, “Petuah Pohon Tua” and “Asal Mula Negeri Jambi”. The results of the study show that (1) folklore “Kesetiaan Bujang Trindil” contains the value of character education, which is friendly, appreciates achievement, honest, responsible, hard work and curiosity; (2) folklore "Malin Kundang" contains the value of character education, namely hard work, independence, democracy, curiosity and religion; (3) folklore “Petuah Pohon Tua” contains the value of character education, namely hard work, friendship, tolerance, democratic, religious and responsibility; (4) folklore “Asal Mula Negeri Jambi” contains the value of character education, namely discipline, creative, honest, curiosity and responsibility.

Keyword
: value of character education; folklore; textbooks; elementary school students

Topic
: Innovations in instructional training and education
Visual Reasoning Analysis Of Female Students In Solving Mathematical Problems

D Darmadi, S Sanusi

Universitas PGRI Madiun

Abstract
To solve the problem of mathematics, students need reasoning. Visualizations can help in reasoning. This paper discusses the results of visual reasoning analysis of female students in solving mathematical problems. The method of study used is a qualitative method with the subject of female students of the Mathematics Education Study Program of Universitas PGRI Madiun. Data is validated with time triangulation. Data that is natural, deep, and widespread are displayed and analyzed. The conclusion of the study is: 1) to solve mathematical problems, female students perform complex steps of completing Polya, namely: understanding problems with visualizations, planning a problem solving with mathematics, planning a problem solving with elimination/substitution, implementing a plan to solve problems with determinations, checking results, planning to solve problems with determinations, implementing plans to solve the problems with determinations, examine results, plan to solve problems with coordinate points, implement plans to solve problems with coordinate points, check the results of the sponsorship with the coordinate points; 2) every activity in resolving the problem, female students have done reasoning. However, not all activities are identified to perform visual reasoning. Students tend to still focus on formalities; 3) in the issue, the subject performs reasoning deductive or inductive and visualizes contextually or mathematically as needed.

Keyword: Visual Reasoning, Solving Mathematical Problems
Topic: Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
QUESTIONING STRATEGIES BASED ON STUDENTS' COGNITIVE LEVELS THROUGH STEM IMPLEMENTATION IN ENGLISH FOR ACADEMIC PURPOSES CLASSROOMS

S Sumani, Fabiola D Kurnia, Syafi'il Anam
Universitas PGRI Madiun, Universitas Negeri Surabaya

Abstract
This study was aimed at revealing the phenomena about the questioning strategies based on the cognitive levels employed by the teacher through STEM implementation in the English for Academic Purposes classrooms. The study used a qualitative approach. The study used observation activities to collect the data. The results of this study showed that there were four strategies of questioning related to the functions which were employed by the teacher encompassing diagnosing, assessing, motivating, and procedural. Among those four strategies, diagnosing was found to be the most questioning strategy used by the teacher. Those strategies were also related to the cognitive levels proposed to be the learning objective or targets consisting of remembering, understanding, applying, analyzing, evaluating, and creating. And also, among those cognitive question levels, the analyzing question level was found to be the most cognitive question level employed by the teacher in holding the EAP classrooms.

Keyword: questioning strategies, cognitive levels, STEM, English for Academic Purposes.
Topic: Innovations in instructional training and education
Improving Learning Quality in Classic Literature Through Lesson Study in Sixth Semester Students of Indonesian Language and Literature Education of Universitas PGRI Madiun

D R Soleh, AB Santoso, E Winarsih

Universitas PGRI Madiun

Abstract
Abstract. Lesson Study is an effort to improve the quality of learning (process and results) conducted collaboratively and sustainably by a group of lecturers in the same subject (literature). Lesson Study is conducted based on some stages, namely: (1) planning; (b) implementation (Do); (c) reflection (See). The purpose of Lesson Study are: (1) develop a better understanding of the learning process, especially interaction between lecturers, students, and learning materials; (2) obtain certain useful results for other lecturers to conduct learning; (3) build a pedagogical knowledge through peer learning among lecturers. The benefits of the lesson Study include: (1) documentation of progress for lecturers in conducting his works, (2) obtaining feedback from other lecturers in the group, and (3) publication and dissemination of the final results of Lesson Study.

Keyword : lesson study, plan, do, see
Topic : Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
AN ITEM ANALYSIS OF MULTIPLE CHOICE QUESTIONS ON ENGLISH FINAL TEST

Samsul Arifin, Nuri Ati Ningsih, Woro Widowati
Universitas PGRI Madiun

Abstract
This study brings out an item analysis of multiple choice questions of English final test for the tenth grade of SMK PGRI in the academic year of 2017/2018. The specific purpose of this study is to describe the difficulty level, discriminating index, and distractor effectiveness of multiple choice questions on English final test. The researcher uses a descriptive quantitative as the design of the study. The researcher uses population and sample on student's answer sheets of the tenth grade of SMK PGRI Wonoasri then focusing on the student's answer sheets of MM class which are 22 sheets as the primary data. Through this study, researcher uses documentation technique and uses the test kits of the English final test of the tenth grade of SMK PGRI Wonoasri in the academic year 2017/2018 as the instrument. The data is analyzed by using classical theory measurement and item analysis' formula of Arikunto. The result of this study shows: (1) the level of difficulty which categorized as difficult is 35% (40 items), medium is 47% (19 items), and easy is 18% (7 items); (2) discrimination index that makes the test items are recommended for being rejected is 15% (6 items), accepted 38% (15 items), and not accepted is 47% (19 items); (3) distractor effectiveness which has functioning distractors and categorize an item test as very good is 20% (8 items), good is 43% (17 items), fair 27% (11 items), less good 10% (4 items).

Keyword: Classical Theory Measurement, Difficulty Level, Discriminating Index, Distractor Effectiveness, Item Analysis

Topic: Innovations in instructional training and education
Abstract
This study aims to find out the errors of students with concrete sequential thinking in solving the problem of Elimination-Substitution. Error analysis is revealed based on Newmann's theory. The research method used is a qualitative approach. The subjects of the study consisted of 2 students with concrete sequential thinking skills selected from 32 students of eight grade of SMPN 1 Sawahan. Data collection is obtained through structured interviews. Data analysis techniques consist of three lines, namely data reduction, data presentation, and conclusion drawing. The data validity technique using time triangulation. The results showed that students who had concrete sequential thinking styles in solving Elimination-Substitution problems tended to experience Process Skill and Encoding type errors.

Keyword  : Error Analysis, Concrete Sequential Thinking Styles, Elimination-Substitution

Topic    : Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
THE EFFECTIVENESS OF THE TOURNAMENT CO-OP CO-OP AND TEAMS GAMES (TGT) LEARNING MODEL ON MATHEMATICAL LEARNING ACHIEVEMENTS IN CLASS VIII STUDENTS FROM STUDENT LEARNING MOTIVATION

Puput Mey Indrawati, Davi Apriandi, Reza Kusuma Setyansah, Darmadi

University of PGRI Madiun

Abstract
This study aims to determine: (1) Is the cooperative learning model Co-op Co-op type more effective than the cooperative model Teams Games Tournament type on mathematics learning achievement, (2) Which gives better performance, students with high learning motivation, moderate, or low, (3) Is there an interaction between learning models with learning motivation towards learning achievement in mathematics. This research is in the form of quantitative research. Samples were taken by cluster random sampling technique where the experimental class I was taught by Co-op Co-op learning model and experimental class II was taught by TGT learning model. Data collection techniques used the questionnaire method for motivational data and test methods for students' mathematics learning achievement data. The data technique used a two-cell variance analysis test not the same as the 2 × 3 matrix and further testing using the Scheffe test. The results of hypothesis testing with a significance level (?) = 5% indicate that: (1) There are no differences in effects between learning models on mathematics learning achievement (F_\text{obs} = 0.672 and F_\text{?} = 4.007), (2) There are differences in the influence of each k on learning achievement mathematics (F_\text{obs} = 116,249 and F_\text{?} = 3,156), (3) There is no interaction between the learning model and student motivation towards mathematics learning achievement (F_\text{obs} = 0.1564 and F_\text{?} = 3.1560).

Keyword
Co-op Co-op, Teams Games Tournament (TGT), Learning Motivation

Topic
Innovations in instructional training and education
ANALYSIS OF STUDENTS DIFFICULT IN SOLVING RELATIONS AND FUNCTIONS QUESTIONS BASED ON LEARNING INDICATORS

(1) Masjudin, (2) Ahmad Muzaki, (3) Ade Kurniawan, (4) Yuntawati, (5) Rissa Prisma K.

(1), (2), (3), & (4) IKIP Mataram (5) IKIP PGRI Madiun

Abstract
The purpose of this study is to describe the difficulties of students in solving problems of relationships and functions at the junior high school level. This study outlines the mistakes students make in solving problems, as well as material relations and functions that are difficult to solve. This type of research is a qualitative descriptive study. This research was conducted in class IX MTs Daarul Qur'an with a total of 36 students. The research instruments used included diagnostic test sheets and interview guidelines. The procedure of this study includes the provision of diagnostic test sheets to all students to obtain a student's level of ability. Furthermore, with a purposive sampling technique interview samples were set. Based on the results of the study obtained information that the ability of students to solve the problem of relations and functions there are three categories: high, medium, and low. There are several difficulties experienced by students in solving problems of function relations: (1) many students in each ability have not been able to make a precise definition of the function; (2) Students with low ability and difficulty in performing mathematical procedures; (3) Students with low ability and difficulty in completing problem applications from relations and functions.

Keyword : Student Difficulties, Solving Problems, Relation, Function
Topic : Teaching and Learning in Science, Technology, Engineering, and Mathematics (STEM)
SCHOOL AND CHARACTER CULTURE RELATION AS AN EFFORTS TO IMPROVE THE QUALITY OF BASIC SCHOOL QUALITY IN THE CITY OF EAST JAVA

Titin Kuntum Mandalawati
Universitas PGRI Madiun

Abstract
The character and culture of the school is an important factor in efforts to improve the quality of primary schools in the city of Madiun. This has become urgent due to the emergence of moral degradation and the decline of the character of students in today's era of globalization and modernization. The character and culture of the school need to be optimized in schools so as to create the next generation of people with noble personality and moral values. This research is intended to explore and observe the phenomenology of school character and culture in the elementary school of Madiun city and explore in depth the relationship between the character and culture of the school in order to improve the quality of education. This study uses a qualitative research approach of Interpretive Inductive phenomenology with research procedures based on Grounded Research, (theoretical findings from data obtained in the field). Data sources used were informants namely teachers, principals, students, parents, school committees, and surrounding communities, as well as documents in the field. Data collection techniques using structured interview techniques (in-depht interview), participant observation, and documentation. Data validity uses a credibility test. Data Analysis Techniques using the Grounded Research procedure.

Keyword : Character, school culture, school quality
Topic : Augmented Reality for Education
Pragmatics and the Development of Habituation of Character Education through Cinderela Movie

rosita ambarwati, elin tri susilo

English Education Department Faculty of Teacher Training Education Universitas PGRI Madiun

Abstract
This study covers politeness strategy applied by the main character in Cinderela movie. Brown and Levinson theory is used as the basic principle to analyze the politeness strategy. It is a qualitative study. The objective of this research are to analyze, (1) the types of politeness strategies used by the main character in Cinderella movie, (2) the relation of politeness strategy in Cinderela movie and the development of habituation of character education. Documentation and observation are used to collect the data. The design of this study is content analysis. The data were analyzed by Simak, Libat, Cakap. The result of the analysis are (1) there are four types of politeness strategy that are depicted by main characters in Cinderella movie. Those types are bald on – record strategy, positive politeness strategy, negative politeness strategy, and the last is off – record strategy. The result shows that bald on – record strategy becomes the most frequently used strategy, (2) The analysis of the study strengthen the student’s awareness of being polite.

Keyword: Pragmatics, Politeness Strategy, The Habituation of Character Education

Topic: Virtual Reality for Education
A Syllabus Design to Enhance Vocabulary and Reading Skills in Computer Assisted Language Learning

Laily Nur Affini, Ajeng Setyorini, Dias Andris Susanto

Universitas PGRI Semarang

Abstract

Abstract. This article discusses a syllabus design for a subject called, Computer Assisted Language Learning (CALL). The syllabus aimed to enhance students’ ability in constructing vocabulary in reading online authentic materials. The aim could be reached by implementing the syllabus to the process of learning in CALL. The author used two websites as the main tools and sources of online reading materials and vocabulary practice. The adaptation of using this technology was expected to meet the course objectives and to meet the demands of the syllabus. This study implemented descriptive qualitative research with two classes of students in the first semester as the participants. Data collection was conducted using questionnaire as the instrument in the odd semester of 2018. The findings show that by reading the texts, students gained new knowledge and updated information. They also found that by practicing the vocabulary exercise, it could increase their brain power in memorizing new vocabulary and know how to use the technology to support their learning.

Keyword: CALL, Syllabus Design, Descriptive Research, Vocabulary, Reading

Topic: Computer-based learning
MATHEMATICS PRE-SERVICE TEACHER’S ANALOGICAL REASONING TOWARD CALCULUS PROBLEM

Eka Nurmala Sari Agustina; Dewi Sukriyah; Risdiana Chandra Dhewy; Nurina Ayuningtyas; Lailatul Mubarokah; Ahmad Isobar

STKIP PGRI Sidoarjo

Abstract
The aim of this study is to describe the correlation between the background of Mathematics Pre-Service Teachers’ (MPST) secondary school and their analogical reasoning toward multivariate calculus problems. The sample of this study is 31 MPST of STKIP PGRI Sidoarjo that consist of 18 MPST of senior high school science class alumni, 3 MPST of senior high school social class alumni, 1 MPST of senior high school languages class alumni, 6 MPTS of vocational school technique class alumni, and 3 MPST of vocational school non-technique class alumni. The method of this study was a quantitative method that used non-parametric statistic Chi-Square correlation. This study showed that Chi-Square value is 6.372. It can be concluded that there is no significant correlation between the background of MPST’ secondary school and their analogical reasoning.

Keyword : analogical reasoning, calculus, the background of the secondary school

Topic : Innovations in instructional training and education
TEACHING WRITING BY USING EVERNOTE APPLICATION

Vita Vendityaningtyas, Erlik Widiyani Styati, Krismi Natalia

Department of English Teaching, Faculty of Teacher Training and Education, Universitas PGRI Madiun

Abstract
In writing, students may have numerous strategies in organizing their ideas. The technology invention can be utilized as a means in enhancing student's writing project. One of them is Evernote application as one of the most popular software for keeping and organizing information. This article is aimed at 1) revealing the application of teaching writing by using Evernote as graphic organizer; 2) finding the strengths of using Evernote; and 3) finding the challenges of using Evernote. This article uses library research as a method to gather the information. From the result of study, writing in Evernote is as simple as using a word processor. We need to have a Google account first to sign up to this application. When we have already signed up, we can create “new note.” Once we have finished, give it a title to make it easy to find later and enter texts. The strengths are that Evernote can create different forms including words, audio, and images. Another study also shows that the group of students given graphic organizer can show more rational thought than students without graphic organizer. It also has more interesting display by adding various colors. The challenges for this application are that it requires constant internet connection. It also should be provided by sufficient hardware. Therefore, it is suggested that the institution could provide sufficient means to meet this need. It is because despite of its challenges, this application is beneficial for students and teachers for becoming technology literate in learning process.

Keyword: writing, teaching writing, Evernote application
Topic: Computer-based learning
IMPLEMENTATION OF THE SCIENTIFIC APPROACH ON SOCIAL STUDIES LEARNING BASED ON LOCAL WISDOM THROUGH ADVANCED ORGANIZER LEARNING MODELS OF THE STUDENTS OF JUNIOR HIGH SCHOOLS

Sudarmiani
PGRI University Madiun

Abstract
Background: The scientific approach to scientific steps in learning in the 2013 curriculum develops learning experiences that provide opportunities for students to master the competencies needed for life in the present and future. In order for students to be able to understand the IPS concept better, it is necessary to have a systematic learning plan about how to manage meaningful learning. One of the learning models that can be used is the Advanced Organizer learning model developed by Ausubel. Methods: The method in this study uses research and development methods from Borg and Gall (1983). Data analysis used during development is descriptive analysis, module feasibility analysis based on criteria scores, and analysis of the effectiveness of product development using a t-test. The results: 1. Learning social studies in the city of Madiun so far, has developed learning with constructive approaches, but the results are still dominant in achieving cognitive results. The average student learning outcomes are still low and the participation / activity of students in the learning process is also still low; 2. The Scientific approach to the IPS learning model based on local wisdom through advanced organizers can improve learning outcomes and student learning activities.

Keyword: scientific approach, social studies, local wisdom, advanced organizer

Topic: Innovations in instructional training and education
DEVELOPING AN INTERCULTURE-BASED ASSESSMENT MODEL IN THE TEACHING OF SPEAKING SKILLS FOR ELT STUDENTS IN HIGHER EDUCATION

Aprianoto1, Sofia Maurisa2, Haerazi3
1English Language Education, FPBS IKIP Mataram, Indonesia Jalan Pemuda No 59A Mataram Indonesia Corresponding author: haerazi@kipmataram.ac.id

Abstract
This study is aimed at developing and evaluating the assessment model of (IBES) for English department students in higher education. The result of this study is an assessment model to measure the interculture-based speaking learning for English education students in Higher education. To find out the research results, this study applied the research and development (R&D) design that consists of steps which are identifying problems, designing the model, developing the model in large scale, and disseminating the product. The research instruments covered questionnaire, interview, and speaking test. The research subjects were the fifth semester of FPBS IKIP Mataram, consisting of 29 students. The components of the evaluating the intercultural language learning include reaction, learning, behavior, and result. Meanwhile, the aspects of intercultural competences include knowledge, attitude, skills of interpretation and relation, skills of discovery and interaction, and critical cultural awareness. The intercultural language learning in the teaching of speaking skills was assessed in line with those components during the speaking classes. To validate the product, this study used focus group discussion (FGD). The result of the study showed that the model was effective to be applied to assess speaking skills in ELT classes in higher education.

Keyword : Intercultural Assessment Model and Speaking Skills
Topic : Innovations in instructional training and education
Pengembangan model pembelajaran berbasis proyek dengan time management technique dalam menurunkan prokrastinasi akademik mahasiswa pada mata kuliah Perkembangan Peserta Didik

Dahlia Novarianing Asri1) Rischa Pramudia Trisnani2) Yansa Sulistiyo Wardani3)

Universitas PGRI Madiun

Abstract
This study aims to: (1) describe learning problems in the subject of Student Development; (2) developing a prototype of a project-based learning model with a time management technique, (3) producing a project-based learning model with a time management technique, based on limited test results and extensive trial results. This type of research used in this research is development research. The research was conducted through 4 stages, namely: (1) the stage of exploratory study, (2) the stage of model development, (3) the stage of model testing, and (4) the stage of model testing. Based on the analysis of data in exploratory studies, it can be concluded that: (1) not all lecturers supporting good competencies, (2) most students do not have a good interest in student development subjects, (3) high levels of academic procrastination, (4) learning centered on lecturers, and (4) lecturers have not used a learning model that can reduce the level of student academic procrastination. Based on exploratory studies developed a prototype of a project-based learning model with Time Management Technique to reduce student academic procrastination in Participant Development courses through stages: (1) developing a prototype model into a learning model, (2) developing a prototype model based on expert judgment, (3) development and improvement of models based on limited trials, (4) development and improvement of learning models based on extensive trials. The next step is to test the learning model. After limited trials and extensive trials, the following results were obtained: (1) creating a fun new learning atmosphere,

Keyword : Project Based Learning Model, Time Management Technique, academic procrastination, student development

Topic : Design and implementation of technology-rich learning environment
Reducing Social Conflict through Learning Translation as Multi-culture Understanding

Aris Wuryantoro

Universitas PGRI Madiun

Abstract
Abstract. This study aims to describe the role of learning translation with enhancing multi-culture understanding to reduce social conflict in society. This study used descriptive qualitative method by using documentation technique in collecting data. The source of the data are documentations in the form of intralingual and interlingual translation. The result of the study reveals that translation has four aspects, there are meaning, grammatical structure, communication situation, and cultural context. Besides, translation is closely related to cultural context aspect because translation contains at least cultural aspect from source language and target language. The researchers conclude that learning translation can enhance multi-culture in order to reduce social conflicts. The language used by one society automatically shows its language user or its social identity. The researcher concludes that by mastering language and culture of one society as a part of learning translation, we can reduce social conflict which mainly caused by misunderstanding toward the used language and culture.

Keyword: Keywords: translation, social conflict, multi-culture

Topic: Innovations in instructional training and education
Achievement Motivation Training (AMT) in Entrepreneurship Subject with Game Tournament

Satroji Budiwibowo

Universitas PGRI Madiun

Abstract
Someone who has motivated motivation will always try to exceed the set standards, has confidence in the ability to work independently and optimistically, is not easily satisfied with the results obtained and has a great responsibility for the actions carried out so that someone who has high achievement motivation will more successful in life than those who have low-achieving motives. According to McClelland the motive for achievement is the desire to do the best possible without being greatly influenced by prestige and social influence, but for personal satisfaction, this drive will be more visible in an atmosphere of competitive rivalry. difficult. This means that the standard is reasonable to be achieved. The criticism of this theory is that it tends to be individualistic, while now to achieve higher and greater success requires collaboration in a team (partnership) rather than just competing with others. Therefore the motivation for achievement in a team is "Applying high performance standards and team perfection standards, encouraging other team members and themselves to excel, achieve, and even exceed goals. The problem is achievement motivation cannot be learned by simply conveying motivational theories, but what is more important is how to internalize achievement motivation in every student so that each student will have a large enough achievement motivation to achieve their success in the future. Therefore learning must be made and designed so that learning becomes fun and interesting for students. With a game tournament in learning achievement motivation students can experience the experience of trying to achieve achievements with their team, students can construct their own meaning of achievement motivation and learning becomes more enjoyable and will be longer remembered by students. Standards of task excellence (related to the best achievement of the task), students in entrepreneurship learning are expected to establish: (1). Standards of self-excellence (related to the achievement of higher achievements compared to the achievements that have been achieved so far) and (2) Standards of excellence of other students (related to the achievement of higher achievement compared to the achievements of other students).

Keyword :Keywords: achievement motivation, entrepreneurship, game tournament

Topic :Innovations in instructional training and education