PROCEEDINGS
AISTEEL 2017
THE 2nd ANNUAL INTERNATIONAL SEMINAR ON TRANSFORMATIVE EDUCATION AND EDUCATIONAL LEADERSHIP

Educational Research to Endorse Productive and Innovative Generation in the 21st Century

16-17 October 2017
Ball Room Grand Mercure Hotel, Medan - Indonesia

Organized by:
Post Graduate School
State University of Medan
North Sumatera, Indonesia

Supported and Coordinated by:
Indexing By:

ISSN: 2548 - 4613
Vol. 2, December 2017
Proceedings of The 2nd Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2017)

“Educational Research to Endorse Productive and Innovation Generation in The 21th Century”

Grand Mercure Hotel, Medan City, North Sumatera, Indonesia
October 16-17, 2017

Editorial Board

Editorial-in-Chief
Dr. Juniastel Rajagukguk, M.Si (State University of Medan, Unimed)

Deputy Editor
Dr. Saronom Silaban, M.Pd (State University of Medan, Unimed)

International Advisory Board / Scientific Committee
Prof. Dr. Kala Saravanamuthu (University of Newcastle, Australia)
Prof. Arjen EJ Wals (University of Gothenburg, Sweden)
Prof. Dr. Bornok Sinaga, M.Pd (Unimed, Indonesia)
Prof. Dr. Aytekin Isman (Sakarya University, Turkey)
Prof. Peter Charles Taylor, Ph.D., Med., B.Sc., Dip.Ed (Murdoch University, Australia)
Prof. Dr. Mukhlas Samani, Ph.D (Indonesia)
Prof. Dr. Jailani bin Md. Yunos (University Tun Hussein on Malaysia)
Prof. Dr. Nurahimah Mohd. Yusuf (UTM, Malaysia)
Assoc. Prof. Dr Pedro Isaias (University of Queensland, Australia)
Assoc. Prof. Elisabeth Taylor, Ph.D (Murdoch University, Australia)
Dr. Bambang Sumintono, M.Ed (Universiti Malaya, Malaysia)
Dr. Isma Widyaty, M.Pd (UPI, Indonesia)
Prof. Dr. Syahrul R, M.Pd (UNP, Indonesia)
Prof. Amrin Saragih, MA., Ph.D (Unimed, Indonesia)
Assoc. Prof. Ade Gafar Abdullah, M.Si (Universitas Pendidikan Indonesia)
Eng. Asep Bayu Dani Nandiyanto (Universitas Pendidikan Indonesia)
Prof. Dr. Hartono, M.Pd (Universitas Negeri Semarang)

Please cite the proceeding as “Proceeding of the First Annual International Seminar on Transformative Education and Educational Leadership Vol. 2” with the following abbreviation: Proc. Aist., 2
Preface

The 2nd Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL with web link is http://aisteel2017.unimed.ac.id/) was held on October 16-17, 2017 in Medan City, Indonesia. This conference was organized by Postgraduate School, State University of Medan (Unimed) and is the routine agenda at Unimed now. The Second Annual International Seminar on Transformative Education and Educational Leadership’ is realized this year with various presenters, researchers, lecturers and students from universities both in and out of North Sumatera participate in the theme of which is “Educational Research to Endorse Productive and Innovative Generation in the 21st Century.”

2nd AISTEEL is the annual international seminar with main aim is to discuss of recent research special for Transformative Education and Education Leadership. Several topics like: Teachers Education Model, Research Global Issue in Education, Mathematics and Science Education, Social, Language Education, Vocational Education, Curriculum, Economic, History and Management Education have been discussed at the 2nd AISTEEL 2017. 2nd AISTEEL international seminar provided experts’ view on transformative education and educational leadership as well as curriculum article presentation. There were five keynote speakers have been came Professor Keiichiro Yoshinaga, Dr. Bambang Sumintono, Dr. Sitti Maesuri Patahuddin, and Dr. Yulia Rahmawaty. The organizer had been use online submission system to receive all abstract, full paper and also communication with authors. All of information include with comment of reviewer can be cheked real time by author.

Chairperson

Dr. Rahmad Husein, M.Ed
Welcoming Speech of Director of Postgraduate School State University of Medan

The Second Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL)

The honorable,
- Rector of State University of Medan, Prof. Dr. Syawal Gultom, M.Pd.
- Vice Rectors of UNIMED
- Professor Keiichiro Yoshinaga, PhD, Institute of Liberal Arts and Science, Kanazawa University – Japan
- Dr. Bambang Sumintono, M.Ed., University Malaya – Malaysia
- Dr. Sitti Maesuri Patahuddin, Faculty of Education, Science, Technology and Mathematics, University of Canberra – Australia
- Yuli Rahmawati, Chemistry Education Program, Universitas Negeri Jakarta
- Deans of Faculties of Education, Languages and Arts, Social Sciences, Natural Sciences and Mathematics, Engineering, Sports Sciences, and Economics
- Vice Directors of Postgraduate School of UNIMED
- All speakers, lecturers, researchers, students, and participants

Good Morning
Welcome the honorable guests speakers Professor Keiichiro Yoshinaga, Dr. Bambang Sumintono, Dr. Sitti Maesuri Patahuddin, Assoc. Prof. Emilia Zulmira de FAN, and other speakers, lecturers and students from outside and inside Unimed to this international seminar which is the routine agenda at Postgraduate program of Unimed now. I’m glad that ‘The Second Annual International Seminar on Transformative Education and Educational Leadership’ is realized this year with various presenters, lecturers and students from universities both in and out of North Sumatera and participate in the theme of which is “Educational Research to Endorse Productive and Innovative Generation in the 21st Century.”

Ladies and Gentlemen,

In this second seminar exels the first one related to the administration by online and the publication index by either Thomson Reuters or Google Scholar. By the new policy on student’s publication, postgraduate program really matches the system, particularly for the students who will sit in the oral defence examination. Through the seminar, the postgraduate students improve their article journal writing and it is proved by many articles are submitted by the students.

The plenary speakers coming from 15 provinces in Indonesia will present topics covering multi disciplines. They will contribute a lot of inspiring inputs and new knowledge on current trending educational research topics all over the world. The expectation is that all potential lecturers will share their research findings to educational scientists and researchers as well for improving their teaching process and quality. Thus, this will contribute to the next young generation researchers to produce innovative research findings in education and educational leadership contexts.

This second seminar continues the promotion of the first sequel ‘Developing Future Teachers’ Education Model. Therefore, the propose of this second seminar on the transformative education and educational leadership research will trigger the young professional lecturers and educators to compete in the invention of innovative educational teaching and learning strategies, techniques and leadership.

I hope that the scientific attitude and skills through research will promote Unimed to be a well-known university which persists to be developed and excelled in the future.

Thank you the Rector of Unimed who always supports us in organizing the seminar. Thank you all guest and plenary speakers. Special thanks to both steering and organizing committee who have well-coordinated and colaborated in actualizing the seminar.

Director of Postgraduate Unimed

Prof. Dr. Bornok Sinaga, M.Pd
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Effect of Using Collaborative Learning Strategy on The Student’s Achievement in Writing Descriptive Text</td>
<td>PP</td>
</tr>
<tr>
<td>Nursyah Handayani</td>
<td>1</td>
</tr>
<tr>
<td>The Development of Multicultural Based Teaching Materials on the Observation Report Text for Senior High School Student</td>
<td>5</td>
</tr>
<tr>
<td>Nurhasanah Permata Sari Sembiring, Khairil Ansari, Mutsyuhtito Solin</td>
<td>10</td>
</tr>
<tr>
<td>The Power Behind Advertisement</td>
<td>13</td>
</tr>
<tr>
<td>Endang Larasati</td>
<td>17</td>
</tr>
<tr>
<td>The Effect of Using Audio Visual Media on Student’s Vocabulary Mastery</td>
<td>21</td>
</tr>
<tr>
<td>Resti Citra Dewi</td>
<td>24</td>
</tr>
<tr>
<td>Ideational Taxonomic Relation of Hata Pangupa in Tapanuli Selatan Wedding Ceremony</td>
<td>28</td>
</tr>
<tr>
<td>Mutia Nasution</td>
<td>32</td>
</tr>
<tr>
<td>Pal’s Leadership Style and Teacher’s Performance of Islamic Junior High State School (MTsN) Hamparan Perak Deliserdang Distric</td>
<td>36</td>
</tr>
<tr>
<td>Nurmalu, Maria Ulfah Handayani, Denny Khairani, Desi Prawita</td>
<td>40</td>
</tr>
<tr>
<td>The Influence of Work Motivation on Teacher’s Job Performance of Vocational High School in Medan</td>
<td>44</td>
</tr>
<tr>
<td>Darmawati, Sri Melfayetti, Selamat Triono Ahmad</td>
<td>48</td>
</tr>
<tr>
<td>Error Analysis by Using Tenses of Senior High School</td>
<td>52</td>
</tr>
<tr>
<td>Hariyanto</td>
<td>53</td>
</tr>
<tr>
<td>The Traditional Custom and Ceremonial Tradition in Suku Anak Dalam Language</td>
<td>58</td>
</tr>
<tr>
<td>Patri Ayu Lestari</td>
<td>62</td>
</tr>
<tr>
<td>The Impact of Internet Marketing on Success of Women Micro, Small and Medium Enterprises Innovation as Intervening Variable</td>
<td>67</td>
</tr>
<tr>
<td>Fivi Rahmatus Sofiyah, Ami Dilham</td>
<td>71</td>
</tr>
<tr>
<td>The Effect of Cooperative Integrated Reading and Composition (CIRC) Technique on Students Reading Comprehension</td>
<td>75</td>
</tr>
<tr>
<td>Linda Efrina Nasution</td>
<td>79</td>
</tr>
<tr>
<td>Translation Shifts in Translating Didong from Gayonese in to Bahasa Indonesia</td>
<td>83</td>
</tr>
<tr>
<td>Mike Yurida</td>
<td>87</td>
</tr>
<tr>
<td>The Effect of Team Assisted Individualization (TAI) Strategy on Student’s Reading Comprehension</td>
<td>91</td>
</tr>
<tr>
<td>Khairuni Syafiri</td>
<td>95</td>
</tr>
<tr>
<td>The Effect of Organizational Culture on Working Disciplines of Madrasah Ibtidaiyah Head Master in Deliserdang</td>
<td>99</td>
</tr>
<tr>
<td>Muhammad Rifa’i, Syafaruddin Siahaan, Siman Nurhadi</td>
<td>103</td>
</tr>
<tr>
<td>Student’s Achievement on Reading Comprehension in Narrative Text by Using Think Pair Share Technique (TPS) at SMPN 1 Lubuk Pakam</td>
<td>107</td>
</tr>
<tr>
<td>Eprimi Lestari Hutabarat</td>
<td>111</td>
</tr>
<tr>
<td>Ideational Taxonomic Relations of Hobar on Parpokatan Orja of South Tapanuli</td>
<td>115</td>
</tr>
<tr>
<td>Novrfa Gramahuyanuri</td>
<td>119</td>
</tr>
<tr>
<td>The Effect of Using Task Based Learning Method on the Student’s Achievement in Reading Comprehension</td>
<td>123</td>
</tr>
<tr>
<td>Nilam Ulam Siregar</td>
<td>127</td>
</tr>
<tr>
<td>Relationship of Initiation Structure and Consideration with Effectiveness Leadershhip</td>
<td>131</td>
</tr>
<tr>
<td>Wanti Simanjuntak, Syaiful Sagala</td>
<td>135</td>
</tr>
<tr>
<td>The Effect of Storytelling Method on Students Writing Narrative Text Ability at the Eleventh Grade Students of MAN Panyabungan</td>
<td>139</td>
</tr>
<tr>
<td>Armita Novriana Rambe</td>
<td>143</td>
</tr>
</tbody>
</table>
The Implementation of Curriculum 2013 in Vocational High School 4 Takengon
Zainal Arifin, Herbert C.B. Manalu, Rini Deliana, Fitri Ariyanti ................................................................. 80

The Difference of Mathematical Problem Solving Ability by Using Student Teams Achievement
Division (STAD) and Direct Instruction on System Linear Equation Two Variable in Grade VIII
SMP Negeri 11 Medan
Faradilla Bafaqih, Cecep Nandar .................................................................................................................. 84

The Influence of Problem-Based Learning and Every One is A Teacher Here Models on Higher
Order Thinking Skills in Environmental Pollution Topics
Kurnia Putra, Hasruddin, Ahmad Rafaqi Tantawi
.......................................................................................................................... 89

The Effect of Applying Task Based Learning (TBL) Approach on The Student’s Ability in Writing
Descriptive Paragraph
Vijay Khana
.................................................................................................................................................. 94

Teacher’s Language Style in English Course Class
Dyan Yosephin Hutagalung
.......................................................................................................................... 98

Differences Between Students Mark Taught With Co-Operative Learning Model Type TGT With
Guess The Words Media Compared With Students Mark Taught With Co-Operative Learning
Models With Words Square Media in Hydrocarbon Subject
Hariani Siregar, Gulmah Sugiharti
.................................................................................................................................................. 101

Language Used by Male and Female of Darul Ilmi Murni
Syakri Hidayati
.................................................................................................................................................. 107

The Use of Journal Writing in Improving Student’s Writing Skill of Recount Text
Muhammad Ilham Adha
.................................................................................................................................................. 110

Teacher and Student Perceptions Toward Practical Implementation Obstacles at Learning Chemistry
Sepra Pajar, Ramlan Silaban, Zainuddin Muchtar
.................................................................................................................................................. 114

The Analysis of the Implementation and Problems of Lab Work on Chemistry Learning
Elvira Lastri, Iis Siti Jahro, Marham Sitorus
.................................................................................................................................................. 120

The Implementation of Using Library Card and ICT Based Library Service System in Increasing
Reading Interest of Primary School Students at Tanjung Gading of Batu Bara Regency
Suci Amalia, Asih Menanti
.................................................................................................................................................. 125

Project Based Learning Tools Development on Alcohol and Ether Materials at Natural Science
Faculty State University of Medan
Nadia Armina Ramad, Jamalam Purba
.................................................................................................................................................. 132

The Development of Teaching Material to Write Explanation Text Based on Mind Map
Pienti Mala Ningsih Manalu, Biner Ambarita, Rosmawaty Harahap
.................................................................................................................................................. 138

Improvement of Student Learning Outcome Using Model of Collaborative Based Lesson Study with
Student’s Worksheet on Materials Hydrolisis
Agus Muliaman, Laila Majnun Hutagaol
.................................................................................................................................................. 141

The Application of Comic Learning Media to Improve Student’s Achievement on Reduction and
Oxidation Reaction Topic
Anggi Desviana Siregar, Rini, Herdini
.................................................................................................................................................. 146

The Application of Cooperative Learning Round Robin to Improves Student Learning Achievement
on the Subject of Electrolyte-Non-electrolyte and Redoxin Class X SMAN 1 Seberida
Nora Santi, Betty Holiwarni, Johni Azmi
.................................................................................................................................................. 150

The Effect of Combination Cooperative Learning Models Toward Learning Result
Sapnita Idamantha Darul
.................................................................................................................................................. 154

The Maintenance of Hokkien Among Chinese Speakers in Stabat
Widya Ningsih
.................................................................................................................................................. 159

Effect of Blended Learning Model and Learning Style to Civic Education Learning Results in Class
VII in Junior High School Panca Budi Medan
Madina Qudsia Lubis, Reh Bungana Br.Perangin-angin, Mursid
.................................................................................................................................................. 164

EFL Student’s Uses of Um as Fillers in Speaking
Eka Riana
.................................................................................................................................................. 169
The Influence of Role Playing Method and Self Concept of Social Skills of 5-6 Years Old Child
Rabiah Hanum Hasibuan, Anita Yoo, Yusnadi

The Effect of Learning Approach and Personality Type Towards Learning Outcomes
Dhovy Dinda Sari, Julaga Situmorang, Busmin Gunaring

The Effect of Learning Models and Critical Thinking Skills on Social Science Learning Outcomes
Juriah Siregar, Julaga Situmorang, Baharuddin

The Effect of Suggestopedia Method on Student’s Achievement in Vocabulary
Heppy Yersin Digital Purba

Application of Active Learning Strategy Type Everyone is A Teacher Here (ETH) to Increase Student Activity and Learning Outcomes in Chemistry on Salt Hydrolysis
Wilita Fajrinda, Darra Utari Ningsih, Sri Adelila Sari, Habibati

The Effect of Learning Strategy and Type of Personality on Student’s Achievement in Economic Science
Dewi Shara Dalimunthe

Development of Learning Tools Based on Realistic Mathematics Education of Ethnomathematics Nuances to Improve Mathematical Communication Skill Students in Junior High School 2 Percut Seiutuan
Rizqi Jamiyah, Edi Syahputra, Kms. M. Amin Fauzi

The Impact of Cooperative Learning Strategy and Learning Interest Toward the Learning Result of Second Year of Senior High School Students in 2016/2017
Riswan Sianturi, Abdul Main Sibuea, Edward Purba

The Development of Flash Program as a Media of Chemistry Learning on Chemical Equilibrium
Lenni Khotimah Harahap, Albinus Silalahi, Isi Siti Jahro

The Ethnic Mandailing Tradition of Courtship (Markusip) and Revitalization Efforts in the Formation of the Character Youth
Riadi Syafputra Siregar, Ratih Baiduri, Robert Sibarani

The Effect of Education on Unemployment Rate in Indonesia
Rahmat Putra Ahmad Hasibuan, Dede Ruslan, Fitrawaty

Development of Explanatory Text Materials Based on Problem Solving in Senior High School Pematangsiantar
Tiarma Nova Intan Malasari, Biner Ambarita, Malan Lubis

Learning Model of Strengthening Vocational Life Skills With Entrepreneurship Knowledge to Improve Student Learning Outcomes
Husni Wardi Tanjung

A Critical Discourse Analysis Wardah Halal Beauty Advertisements
Ayu Lestari Siregar, Mei Lastri E.F. Butar-Butar

Influence of Creative Problem Solving (CPS) Mathematics Learning Model to Mathematical Problem Solving and Self Efficacy Students of SMA Negeri 3 Binjai
Nurcahaya Hutaoosit, Martua Manullang, Ani Minarni

Differences in Mathematics Problems Solving Students With Implementing Learning Model Think Pair Square and Group Investigation in Junior High Schools
Abdul Halim, Edy Surya

The Acquisition of Nouns and Verbs of Mandailingnese by Two-Year-Old Mandailing Children
Marwah, Amrin Saragih, Sri Minda Murni

Utilization of ICT Learning in Senior High School Teladan Medan
Tengku Salva Miranti

The Effect of Cooperative Learning Model Based Interactive Media and Interpersonal Communication on Student’s Achievement
Catur Ayu Wialandari, Efendi Napitupulu, Keysar Panjaitan

Developing of Learning Material Based on Problem Based Learning to Increase Student’s Mathematical Reasoning Ability and Self-Efficacy in Grade X SMA Negeri 1 Medan
Anggi Paramita Daulay, Dian Armanto, Waminton R
Efforts to Increase A Motivation to Learning Math Using “Program” Learning Model.......................... 257
Linda Sari, Edi Syahputra

The Eford of Improving Mathematics Learning Outcome on Quadrilateral and Triangle Matter by Using Gradually Exercise Strategy with The Assistance of Image Media................................. 261
Ady Putra, KMS. Muhammad Amin Fauzi, Yulita Molqi

The Difference on Students’ Mathematical Creative Thinking Ability Between Realistic Approach with Conventional in The State Madrasah Tsanawiyah 2 of Medan...................................................... 264
Siska Lestari, Zul Amry, Hasratuddin

Developing Learning Materials Using Realistic Mathematics Education to Increase Junior High School Students’ Mathematical Disposition and Connection Ability.................................................. 269
Syu’aida Hazar Nasution, Izwita Dewi, E. Elvis Napitupulu

Developing Learning Materials Using Problem Based Learning to Increase Senior High School Student’s Mathematical Disposition and Representation Ability........................................ 275
Dewi Khairani, Mulyono, Izwita Dewi

The Effect of Question Students Have Strategy on The Result of Students Learning in Mathematics... 281
Yuliani Aruan, Edi Syahputra

Analysis of Academic Supervision Competence and Managerial Supervision in Improving the Performance of Vocational High School Supervisors in Langsa City...................................................... 284
Muhammad Hendra, Saut Purba, Mian Siahaan

The Use in Active Learning Strategy of Learning Starts with a Question Type in the Mathematics Learning................................................................. 289
Jeni Putria Eflik, Ani Minami, Pardomuan Sitompul

Improving the Ability to Learn Math by Using Rubu’ al-Mujayyab Media........................................... 293
Muhammad Hidayat, Edi Syahputra, E. Elvis Napitupulu

The Impact of Education Cost and Government Spending the Interest Rate of Bank Indonesia... 297
Julika Rahma Siagian, Dede Ruslan, Arwansyah

The Implementation of Problem Based Learning Models to Improve Mathematical Problem Solving Ability of Students on Arithmetic Materials in Class VII Junior High School..................... 301
Elidar Tanjung, Izwita Dewi, Mulyono

The Effect of Learning Strategies to Trial By Jury in Participantiont Mathematics Learning Student of Junior High School...................................................... 305
Rizka Putri Rahayu, Ani Minami, Zul Amry

The Differences Between The Effect of Realistic Mathematics Learning Approach to Conventional Learning with The Students Mathematics Learning Outcomes in Junior High School of 38 Medan Grade VII............................ 309
Diah Ari Sapatri, Syafari

The Effect of Value National Exam Standards at Learning Achievement of Students at Senior High School........................................................................................................... 312
Nurdiana Fahmi, Bornek Sinaga, W. Rajagukguk

The Effect of Open Unemployment Rate and Level of Vocational High Education to Poverty in North Sumatera Province .................................................................................................. 315
Zalaili, Indra Maipita

The Application of Cooperative Learning of Think-Pair-Share (TPS) Type to Increase the Students’ Ability of Problem-Solving................................................................. 320
Mdriqah Fadhilah Siregar, Zul Amry, Syafari

The Relationship Between Metacognitive With the Results of Learning Outcomes on the Fungi Topic.. 324
Elizabeth, Herbert Sipahutar, Syahmi Edi

Comparison of DNA Isolation Methods from Economically Valuable Plants in Indonesia................ 327
Chairiyani Rizka, Fauziyah Harahap, Syahmi Edi

Development of Learning Device Based on Realistic Approach to Improve Problem Solving Ability Mathematics of Student at Junior High School........................................ 333
Susanna Romaria Harahap
Efforts to Improve Understanding and Use Concept of Additive Fractions and Reduction Using Media Comics on Model Cooperative Learning Type Student Team Achievement Division (STAD)......
Ratu Natalia Perangin-angin, Sahat Siahaan

The Effect of Cooperative Learning Type Games Teams Tournament (TGT) of Mathematics Learning Outcomes in the Fractions Matter.................................................................................................................. 342
Ansori Hasibuan, Asmin Panjaitan, Asrin Lubis

Development of Authentic Mathematics Assessment in Application of Problem Based Learning Model to Improve Problem Solving Ability and Understanding of Student Mathematics Concept at Namorambe Secondary Private Middle School Junior High........................................................................................................................................................................................................ 347
Kartika Sari, Asmin, Bornok Sinaga

The Increasing of Student’s Mathematics Problem Solving Ability and Learning Motivation Through Problem Based Learning Model.................................................................................................................. 351
Ridha Maulida

Dialect of Batak language Used by Senior High School Students’.......................................................... 358
Rafika Nur Rahman

The Effectiveness of Tandur Method of Improving Students’ Learning Ability in Junior High School.
Rahmatul Islam Elmujahidah, Mulyono, H. Banjarnahor

The Effect of Reciprocal Teaching Approach to Student Achievement on Ecosystem Topic in Junior High School........................................................................................................................................................................................................ 365
Nilawati, Nurrika Dewi

Improvement of Student Learning Result by Using Cooperative Learning Model of Teams Games Tournament Type on Algebra Function Limit.................................................................................................................. 367
Rismalyah Manalu, E.Elvis Napitupulu, Martua Manullang

Noun Phrase of Culture Articles in The Jakarta Post.......................................................................................... 371
Misdiana

Application of Cooperative Learning Model Type Think Pair Share for Improved Communication......
Nurhasanah

Implementation Model of School Policy in Constructing Behavior of Troubled Students................................. 378
Khairatari Purnama Nasution, H. Syaiful Sagala

Efforts to Improving Creativity and Mathematics Learning Outcomes of Students With SPLET Strategy.......................................................... 382
Antoni

The Influence of Physical Education in Establishment of Self Esteem.......................................................... 386
Yustinus Tarigan, Tarzyat Nugraha

The Improvement of Dance Art Learning Achievement for Deaf Students Through Total Communication Application (Gesture/Signal) in Sekolah Luar Biasa (SLB) - E Negeri Pembina Tingkat Provinsi Sumatera Utara........................................................................................................................................................................................................ 390
Siti Maryam

Innovation of Media Video Compact Disc Instructional Pencak Silat for High School........................................ 393
Marli Perangin-angin, Imran Akhmad, Agung Sunarno

Achievement Strategy of the Indonesian National Qualification Framework Based Curriculum Generic Description of Sport Education Postgraduate Program Universitas Negeri Medan.......................................................... 397
Muhammad Supriadi Siregar, Nurhayati Simatupang, Albadi Sinulingga

The Effect of Teaching Styles and Motor Ability as The Result of Study Dribbling Football........................................ 401
Muhammad Fajar Doli Siregar

Semantic Analysis of English Loan Words in Indonesian Electronic Paper (Analisa)........................................ 404
Putri Nurul Rahmadani Siregar

Analysis of Empowerment of Competence Sinergy on Optimization of Education System........................................ 408
Rameyanti Tampubolon

Inquiry-Based Video Learning Media For Overcoming Student Learning Difficulty (Case Study at State Junior High School 3 Lubuk Pakam Deliserdang District)........................................................................................................................................................................................................ 412
Megawati
The Development of Mathematics Learning Tool Oriented on Problem Based Learning to Enhance Mathematics Problem Solving Ability and Self Efficacy

Solawati Nainggolan, Mulyono, Hasratuddin

The Effectiveness of Contextual Inquiry-Based Worksheet on the Matter of Fungi on Food Towards Students’ Higher-Order Thinking and Science Process Skills of Biology Education

Nurjamiah Siregar, Hasruddin, Syahmi Edi

The Function of Limits Mastery on Mathematics Learning Achievement in Derivative Subject at the Eleventh Grade of Madrasah Aliyah Yayasan Pendidikan Karya Setia Padangsidimpuan

Hasna Dewi Ritonga

Effect of Education Level, Income, Inflation on Community Consumption Pattern in North Sumatera Province

Nelly Hutajulu, Fitrawaty, M.Fitri Rahmadana

Application of Problem Based Learning Model Assisted by Cabri Software to Improve Problem Solving Ability of Mathematics Students

Ahmad Darmawan, Edi Syahputra, Kms. M. Amin Fauzi

Optimization of Academic Supervision Competence of High School Supervisor in Karo Regency with Critical Events Model (CEM)

Karyawan Keliat, Yasaratodo Wau, Irsan

The Concept of Physics Learning Media Based Computer Animation

Ratna Tanjung, Mukhtar, Efendi Napitupulu

Cultivating Children’s Critical Attitude with Educational Philosophy

Daulat Saragi
The Eford of Improving Mathematics Learning Outcome on Quadrilateral and Triangle Matter by Using Gradually Exsercise Strategy with The Assistance of Image Media

Ady Putra
Univesitas Negeri Medan
Medan, Indonesia
E-mail: ady.putra.ritonga@gmail.com

KMS. Muhammad Amin Fauzi, Yulita Moliq
Univesitas Negeri Medan
Medan, Indonesia

Abstract—The purpose of this research to improve students' mathematics learning outcomes in rectangular and triangular matters by using gradually training strategy and with the assistance of image media in class VII of islamic junior high school Cerdas Murni Tembung. This research was a classroom action research with the subject of the research was the students of class VII islamic junior high school Cerdas Murni Tembung as many as 40 students, consisting of 20 male and 20 female students. This research was conducted in 2 cycles in four meetings, consisting of four stages: planning, action, observation, and reflection. To measure students' abilities, researchers used observation sheets of student activities, pretest and post test questions in multiple choice type which had been given to all students. Based on the pretest result, the percentage of classical learning was 7.5% (3 students). After being given a teaching action by using a gradually training strategy and with the assistance of image media obtained the percentage of completeness in cycle I was 42.5% (17 students) and in cycle II the completeness percentage level became 87.5% (35 students). Based on the results of this research, it might be concluded that learning by using gradually training strategy with the assistance of image media improved the results of mathematics learning on quadrilateral and triangle matter.

Keywords—gradually exercises learning, image media, learning outcomes, mathematics

I. INTRODUCTION

Education plays a very important role in improving the quality of Human Resources. Schools as a means of formal education should have a program in exploring the potential of students themselves for the purpose of education can be achieved. Teachers as an important element in the education system in charge of directing student learning activities in order to achieve learning objectives, in order to improve the quality and quality of students. In mathematics learning a teacher is expected to create the right service to ability, potency, interest, talent, and requirement of student about math which is very diverse in order to happen optimal interaction between teacher (tes, 2018) with student and student with student in studying the mathematics. Therefore it is very necessary learning strategies that can make teachers and students become more active. Based on the observation in islamic junior high school Cerdas Murni Tembung found the result of study result of student of class VII especially in math lesson still low. And from the result of pre test data, it was found that 37 students from 40 students did not reach the index of 65 points. A learning process can be said to succeed if: a) the absorptive capacity of teaching materials that are taught to achieve high achievement, either individually or in groups, b) the behavior outlined in the specific teaching / instructional objectives has been achieved by students, individually or in groups [1].

Constructivistic theory developed by Piaget, argues that basically individuals since childhood already have the ability to construct their own knowledge, through the process of assimilation and accommodation of existing schemes. Scheme is a cognitive structure that is formed through the process of experience. Assimilation is the process of refining the scheme that has been established, and accommodation is the process of schema change [2]. It is necessary to improve learning schemes that can improve learning in the classroom. Therefore researchers conduct classroom action research (PTK). Through the PTK the problems of education and learning can be studied, improved and completed, so that innovative education and learning processes and better learning outcomes can be realized systematically. One of the schemes applied by researchers in this case is the use of tiered training strategies with the help of image media. Strategy of tiered training is a series or arrangement of learning activities by giving or explaining the material and followed by
providing structured and systematic exercises on what students have learned so as to acquire a skill by giving practice questions to students starting from the problem of easy to the problem - that is more difficult with teacher guidance. Students practice to imitate the modeling done by the teacher by being guided step by step so that it can solve the problems. This exercise can be aimed at understanding and applying the theories he or she studies. Exercise will mean that learners are informed of their mistakes. During the practice the learners should be accompanied and mentored. In the guidance of teachers pay attention to learning outcomes and learning process learners. To acquire skills in completing math problems requires repetitive and tiered exercises, the goal is that students are able to understand the level of the problem, ranging from the easiest to the most difficult. The purpose of this study are: 1). To improve the result of learning mathematics with Strategy of Tiered Training with support of image media can 2). To find out student learning outcomes after applying the Tiered Training Strategy with the support of image media.

II. METHOD

This research was conducted at Islamic Junior High School Cerdas Murni Tembung Deli Serdang in Grade VII of Second Semester of Lesson 2014/2015. The subjects of this study were 40 students consisting of 20 male students and 20 female students. This research uses classroom action research method. This research has a cycle activity. Each cycle is implemented in accordance with the changes to be achieved, the cycle consists of 1) planning; 2) acting; 3) observing; and 4) reflecting. The relationship between the four components shows a cycle or repetitive activity. This cycle is one of the main characteristics of classroom action research, namely that action research should be carried out in the form of cycles rather than just one intervention course.

Instrument of data collection used in this research is test result of learning. The test is a method (which may be used) or a procedure (which needs to be taken) in the framework of measurement and assessment in the field of education, in the form of assignment or a series of tasks (either in the form of questions to be answered), or orders (to be done) by the testee, so that (on the basis of data obtained from the measurement results) can produce values that can symbolize behavior; which values can be compared with the values achieved by other testees, or compared with certain standard values [3].

From the results of pre test only 3 students who achieve the value of mastery ≥65 and 37 others are not complete. The percentage of classical absorbency value obtained is 7.5%, the percentage of classical absorption is not yet complete, with the average grade obtained is 43.33 because the percentage of classical absorbency value has not reached 85%.

From the problems that have been found, researchers create a learning plan that improves the results of learning mathematics through a strategy of tiered training with the support of image media in class VII Islamic junior high school Cerdas Murni Tembung and after done post test found the data as follows:

<table>
<thead>
<tr>
<th>NO.</th>
<th>Value of mastery</th>
<th>Extent</th>
<th>Many Students</th>
<th>Percentage of Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt; 65</td>
<td>Not complete</td>
<td>37</td>
<td>92.5%</td>
</tr>
<tr>
<td>2</td>
<td>≥ 65</td>
<td>Complete</td>
<td>3</td>
<td>7.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jumlah</td>
<td>40</td>
<td>100%</td>
</tr>
</tbody>
</table>

From the results of pre test only 3 students who achieve the value of mastery ≥65 and 37 others are not complete. The percentage of classical absorbency value obtained is 7.5%, the percentage of classical absorption is not yet complete, with the average grade obtained is 43.33 because the percentage of classical absorbency value has not reached 85%.

From the problems that have been found, researchers create a learning plan that improves the results of learning mathematics through a strategy of tiered training with the support of image media in class VII Islamic junior high school Cerdas Murni Tembung and after done post test found the data as follows:
There is an increase in the percentage of completeness but has not reached classical completeness of 85%. In this cycle I obtained the average value is 60.33. Then performed improvements in cycle II, especially in terms of pedagogic and time efficiency in the use of power point media.

After done cycle II then found the data as follows:

<table>
<thead>
<tr>
<th>NO</th>
<th>Value of mastery</th>
<th>Extent</th>
<th>Many Students</th>
<th>Percentage of Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt; 65</td>
<td>Not complete</td>
<td>35</td>
<td>87.5%</td>
</tr>
<tr>
<td>2</td>
<td>≥ 65</td>
<td>complete</td>
<td>5</td>
<td>12.5%</td>
</tr>
<tr>
<td>Jumlah</td>
<td></td>
<td></td>
<td>40</td>
<td>100%</td>
</tr>
</tbody>
</table>

Based on the above table it can be seen that 35 students have achieved the value of ≥65 in learning completeness, while 5 students still not complete. The percentage of classical absorption obtained by students who have completed is 87.5%. In this second cycle, the average score is 69.33, with the average value of student learning outcomes so that there is no need to improve learning again because there is an increase in the results student learning compared to cycle I.

IV. CONCLUSION

Based on research conducted in class VII-2 islamic junior high school Cerdas Murni Tembung Concent can be summarized as follows: 1). The application of tiered training strategy with the support of image media can improve the learning outcomes of mathematics on the subject of quadrilateral and triangle in class VII-2 islamic junior high school Cerdas Murni Tembung. This is based on the average teacher observation (44.5) and average student observation (36.5) in cycle I. And in cycle II the average teacher observation (45) and average student observation (45) . 2). Implementation of learning strategy with image media support can improve students’ mathematics learning outcomes on triangle material and rectangle seen from the result of student learning in classical that is from 40 students there are 17 students (57.5%) which have complete study and there are 23 students (42.5 %) that is not completed in the first cycle to 35 students (87.5%) who have completed the study and there are 5 students (12.5%) that is not complete in cycle II.

There are advantages of this research as follows: 1) Provide an opportunity for all students to express their opinions about what the teacher asked. 2). Train more students in solving more problems and tiered. 3). Students pay more attention when teachers explain with the support of image media, because in learning students usually only listen to teachers without using the media.

REFERENCES