PROCEEDINGS AISTEEL 2018
THE 3rd ANNUAL INTERNATIONAL SEMINAR ON TRANSFORMATIVE EDUCATION AND EDUCATIONAL LEADERSHIP

Education, Learning and Leadership Innovation

03-04 October 2018
Emerald Garden Hotel, Medan - Indonesia

Organized by:
Postgraduate School
State University of Medan
North Sumatera, Indonesia
Proceedings of The 3rd Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2018)

“Education, Learning, and Leadership Innovation”

Emerald Garden Hotel, Medan City, North Sumatera, Indonesia
October 3-4, 2018

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. 3” with the following abbreviation: *Proc. Aist., 3*
Preface

The 3rd Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2018) was held in Emerald Garden Hotel, Medan City-Indonesia on 3-4 October 2018. This seminar is organized by Postgraduate School, Universitas Negeri Medan and become a routine agenda at Postgraduate program of Unimed now.

The AISTEEL is realized this year with various presenters, lecturers, researchers and students from universities both in and out of Indonesia participating in, the seminar with theme “Education, Learning and Leadership Innovation.” The plenary speakers coming from various provinces in Indonesia have been present topics covering multi disciplines. They have contributed many inspiring inputs on current trending educational research topics all over the world. The expectation is that all potential lecturers and students have shared their research findings for improving their teaching process and quality, and leadership.

The third AISTEEL presents a keynote speaker and 4 distinguished invited speakers from Australia, Singapore, Taiwan, and Malaysia. In addition, presenters come from various Government and Private Universities, Institutions, Academy, and Schools. Some of them are those who have sat and will sit in the oral defence examination.

There are 326 articles submitted to committee, some of which are presented orally in parallel sessions, and others are presented through posters. The articles have been reviewed by double blind reviewer and 198 of them were accepted for published by Atlantis Press indexed by International Indexation. Meanwhile 83 papers were published in online International Proceedings indexed by Google Scholar. The Committees of AISTEEL invest great efforts in reviewing the papers submitted to the conference and organizing the sessions to enable the participants to gain maximum benefit.

Grateful thanks to all of members of The 3rd Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2018) for their outstanding contributions. Thanks also given to Universitas Negeri Medan for published this volume.

The Editors

Bornok Sinaga
Rahmad Husein
Juniastel Rajagukguk
# Table of Contents

**Titles and Authors**

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design of Physical Practicum Tools on Rotational Dynamics Matter with Scientific Concept</td>
<td>Fretty Doharni Ritonga; Nurdin Bukit; Betty M.Turnip</td>
<td>1</td>
</tr>
<tr>
<td>Analysis of the Leading Sector and Its Effect on the Economy in Pakpak Bharat Regency</td>
<td>Dinar Melani Hutajulu; M. Nasir; Arwansyah</td>
<td>6</td>
</tr>
<tr>
<td>Analyze the Characteristic and Factors Cause of Bullying Behaviours in Early Childhood</td>
<td>Fadhilah Syam Nasution; Anita Yus; Aman Simaremare</td>
<td>12</td>
</tr>
<tr>
<td>Play Finger Painting in Creative Art Model to Help Smooth Motoric Development and Creativity of Group a in Kindergarten at Aek Loba Pekan Village</td>
<td>Lola Wita Harahap; Sri Milfayetty; Rosmala Dewi</td>
<td>18</td>
</tr>
<tr>
<td>Maintenance of Gayonese Kinship Terms by Gayonese Minority Migrants in Jabodetabek</td>
<td>Desi Purnama Sari; Siti Aisyah Ginting; Berlin Sibarani</td>
<td>22</td>
</tr>
<tr>
<td>Effect of Functional Training and TRX Suspension Training on Body Composition member Golden Fitness and Spa</td>
<td>Rafliansyah; Nurhayati Simatupang; Albadi Sinulingga</td>
<td>26</td>
</tr>
<tr>
<td>Interpersonal Metaphor Used in the Boss Baby Movie</td>
<td>Khairuni Syafitri; Siti Aisyah Ginting; Anni Holila Pulungan</td>
<td>29</td>
</tr>
<tr>
<td>Speech Act in Indonesia Lawyers Club: KPK vs Novanto</td>
<td>Theresia Fransiska Sidabutar; Zainuddin; Busmin Gurning</td>
<td>32</td>
</tr>
<tr>
<td>The Effect of Instructional Strategy and Style Ofthinking Sequential on Students Outcome MAN Medan</td>
<td>Siti Aisyah Hanim; Tiur asih siburian; Darwin</td>
<td>36</td>
</tr>
<tr>
<td>The Effect of Cooperative Learning Models and Self Efficacy on Student Mathematics Learning Outcomes</td>
<td>Sabdo Puji Rahayu; Mukhtar; Keysar Panjaitan</td>
<td>39</td>
</tr>
<tr>
<td>Ideational Grammatical Metaphor in Reading Texts for Senior High School English Textbooks</td>
<td>Diemam Ferzhawana; Siti Aisyah Ginting; Zainuddin</td>
<td>43</td>
</tr>
<tr>
<td>Effect of Soft Modification on Student Learning Results PAB 13 Kwala Begumit Private Vocational School</td>
<td>Iskandar Fahmi</td>
<td>47</td>
</tr>
<tr>
<td>Differences in Metacognitive Ability of Students Through Learning Realistic Mathematics Education and Problem Based Learning in Pangkalan Susu Senior High School</td>
<td>Chairi Mutia Lubis; Waminton Rajagukguk; Kms.M.Amin Fauzi</td>
<td>51</td>
</tr>
<tr>
<td>Development of Interactive Learning Media Projection of Working Drawing on Students of Class X TKR in SMK Markus 2 Medan</td>
<td>Irwan Panggabean; R. Mursid; Samsidar Tanjung</td>
<td>56</td>
</tr>
<tr>
<td>Metaphor of Modality in Donald Trump’s Speech in United Nation General Assembly 2017</td>
<td>Nursyah Handaya; Siti Aisyah Ginting</td>
<td>60</td>
</tr>
<tr>
<td>Traditional Sport Of Silek Tuo In Minangkabau Community (a study of Silek tuo advice)</td>
<td></td>
<td>63</td>
</tr>
</tbody>
</table>
Prima Nanda; Sabaruddin Yunis; Agung Sunarn

Improved Student’s Generic Science Skills With The Application of Cooperative Learning Models Based on Batak Culture

Rika Sari Indah Harahap; Derlina; Rahmatsyah; Sahyar; Bornok

Management Development Athletes of Shorinji Kempo North Sumatra Region

Arti Kurniaty Bangun

Efforts to Improve Learning Results Free Basketball Shot (Free Throw) Through The Application of Teaching Style Inclusion

Bob Rahmat Manalu

Development of Egosan Engineering Extension Models with Straight Sticking in Pencak Silat

William Filipus; Amir Supriadi; Tarsyad Nugraha

The Development of Interactive Learning Media of Athletic on Physical Education in SMP Negeri 15 Medan

Akhdhem Khaidir; Budi Valianto; Tarsyad Nugraha

The Effect of Learning Model and Self-Reliance Learning toward Science Learning Outcomes

Rohima; Mukhtar; Samsidar Tanjung

The Effect of Learning Method and Kinesthetic Perception on The Learning Outcomes of Lay Up Basketball

Saiful Adrian; Nurhayati Simatupang; Suprayitno

Analysis Of Physical Education Teacher Management Skills In State Elementary School Sub-District Medan Tembung

Syahrul Effendi Nasution; Amir Supriadi; Alhadi Sinulingga

Innovation Of The Speed Model Using Running With The Ball Techniques In Football

Julio Roberto; Amir Supriadi; Novita

The Development of Penetration Drill Training Technique of Wrestling Sport

Ihsan Idris Silalahi; Jan Bobby Nesra Barus

Speech Function of Anies Baswedan’s Speech in Approval Ceremony as the Governor of Jakarta in the Period of 2017-2022

Ahmad Rifa’i Ritonga; Sumarsih

Development of Web-Based Learning Media to Enhance Writing Capability of Biography Text of Student Class X SMA

Rencus B. Sinabariba, Tiur Asi Siburian, Mutsyuhito Solin

Implementing the Teaching Supervision by Principals in Improving the Performance of Teachers in Aceh Besar

Said Ashlan

Female Principal Leadership

Hendro Widodo; Hengkang Bara Saputra

The Ways of Rohingya Teenagers in Medan Realized Their Language Attitude

I Wayan Dirgayasa; Rahmat Husein; Lonni NurIffah Nasution

Metaphor in Umpasa of Saurmatua Toba Batak Ceremony

Heppy Yersin Digita Purba; Rahmad Husein; Anni Holila Pulungan


Mawar Sari

Figurative Expressions in The Karo Batak Wedding Ceremony Generated by The
Philosophy of Rakut Sitelu
Desi Haryati Nianggolan

Evaluation of Implementation of Sustainable Professional Development (PKB) for Junior High School Physical Education Teachers to Increase Professionalism in Tebing Tinggi City
Mhd Fazar Afandi

Development of Innovative PJOK teaching materials on floor gymnastics materials to improve learning outcomes of Grade Students at Junior High School
Bangun Saragih

The Influence of the Discovery Learning Model assisted with Image Media and Motivation Against Civics Learning Outcomes of Students in Class IV of Public Elementary Schools 055980 Aman Damai 2017/2018
Heryansyah Ginting; Dede Ruslan; Reh Bungana Br.Perangin-angin

Development of science teaching materials based on Science Technology Society (STM) and its influence on learning outcomes of fourth grade students of MIN Medan Tengah
Diaa Hafizhotul Husna; Nuraini; Ramlan Silaban

The Improvement of Cooperative Learning Model Application Skill in Numbered Head Together Through Clinical Supervision of Art Teacher in SDN 060886 Medan Baru
Unita Vitta Omas Sianturi; Martua Manullang; Rosmala Dewi

Gold of North Sumatera Program Coach Performance
Suyono; Hariadi; Supryetna

Transitivity Systems Analysis of Bilingual Civic 3 Education Textbook for Grade XII
Jusup Sitepu; Anni Holila Pulungan; I Wayan Dirgeyasa Tangkas

The Lecturer Performance Development of the STKIP Bina Bangsa Getsempena Banda Aceh
Saiful Bahri

The Interference of Batak Mandailing Language to Indonesian (In The Interaction At The Seventh Grade Students Of Madrasah Tsanawiyah Swasta Al-Azhar Kabupaten Tapanuli Selatan Padang Sidimpuan)
Siti Jahria Sitompul; Abdurrahman Adisaputra; Sumarsi

The Influence of Microbiology Dictionary and Microbiology Textbook Utilization in the Contextual Learning Framework on Biology Students Higher Order Thinking Skills
Kiki Rizqi Sahara; Hasruddin; Ashar Hasairin

The Differences of Learning Style and Students’ Creativity to Students’ Achievement in Dribbling the Ball in Playing Football of Seventh Grade Students of SMP Ar – Rahman Percut
Muammar Afif Marpaung; Imran Akhmad; Rahma Dewi

Development of Gobag Sodor Game Model to Increase Interest in Elementary Students
Siska Nova Undari

The Influence of Research-Based Learning with Portfolio Assessment on Science Process Skills in Microbiology Course for Biology Program Students
Saudah Rahmayanti; Hasruddin; Tumiur Gultom

The Influence of Teaching Style and Confident Against the Results of a Study of Shooting in the Game of Football (Experiment Studies the Self Check Style and the Guided Discovery Style at a Private Junior High School Seventh Grader

Tembung Sabilina)  
*Muhammad Syaiful; Ramadhan Harahap*

Development of Mirror Writing Teaching Materials Based on Class XI Media Literation of Lolomatua 1 State High School

*Yanida Bu'ulolo; Biner Ambarita; Marice*

The Development of Teaching Materials for Technology-Assisted Procedure Text in Vocational High School

*Nova Andarini; Biner Ambarita; Malan Lubis*

Development of Adobe Flash Based Floor Gymnastics Media Learning on Health Sport Education Lesson

*Hardiansyah*

The Effect of Learning Approach and Linguistic Competence Capability Reading The English Narrative Text of Student SMA Negeri 6 Padangsidimpuan.

*Sukriyah Batubara; Keysar Panjaitan*

Analysis Effect of Household Consumption, Investment and Labor to Economy Growth In Sumatera Utara

*Richna Handriyani; Arwansyah; Sahyar*

Idioms Translation Strategies in Pasung Jiwa Novel English Version

*Hariyanto; Amrin Saragih; Sumarsih*

Code Mixing in Novel: A Case of Indonesian Literary Work

*Nural Hidayanti Hasibuan; Amrin Saragih; Sumarsih*

Logico-Semantic Relation in Presidential Debate Between Hillary Clinton and Donald Trump

*Annisa Risma Khairani Lubis; Della Fransiska Ginting; Jumino Suhadi*

Semiotic Meanings in Cigarette Advertisement Texts

*Rodearta Purba; Zainuddin; Amrin Saragih*

Modality as Hedging Device in the US Presidential Election Debate

*Roobby Hamdanur; Anni Holila Pulungan; Zainuddiin*

The Improving Mathematical Communication Ability Through Realistic Mathematical Approach Based on Toba Batak Culture

*Aman Sanusi Siregar*

Speech Functions of Doctors and Patients on Medical Consultation Process

*Resti Citra Dewi; Anni Holila Pulungan, Sumarsih*

The Development of Venturimeter Instrumentation in Dynamic Fluid

*Zahrani Dalimunthe; Rahmatsyah; Derlina*

Lexical Metaphors in Onang-onang of Bobby and Kahiyang Tortor Dance

*Siti Rahma Ritonga; Anni Holila Pulungan; Didik Santoso*

The Discourse Markers in President Joko Widodo’s Speeches in KTT APEC China in 2015

*Syahbuddin Nasution1; Busmin Gurning; I Wayan Dirgayasa Tangkas*

Preparation of Papers in Two-Column Format for AISTEEL Conference Proceedings Translator’s Strategies in Transferring Cultural Values in Ratatouille Film

*Femy Septiani; Anni Holila Pulungan*

Lexical Metaphor In Printed Car Advertisements

*Misdiana; Siti Aisyah Ginting; Amrin Saragih*

Political Discourse Analysis of Donald Trump Political Speech

*Elisa Silviani Siregar; Prof. Dr.Zainuddin, M.Hum; Prof.Dr. Sri MindaMurni, MS*

Motivation of Farmers in Group Management to Develop Maize Cultivation
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appraisal of Healthy Product Advertisement on Television</td>
<td>Nurliana Harahap; Mahendra Ginting Manik; Indah Listiana</td>
<td></td>
</tr>
<tr>
<td>Lexical Metaphor in Andrea Hirata’s “The Dreamer” Novel</td>
<td>Nurun Nazipah Harahap; Siti Aisyah Ginting; Rahmad Husein Napitupuluh</td>
<td>274</td>
</tr>
<tr>
<td>Impoliteness Strategies Used by Governor Candidates of DKI Jakarta in Governor Election Debate 2017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intertextuality in Travel Umroh Advertisement</td>
<td>Sri Minda Murni; Busmin Gurning</td>
<td>281</td>
</tr>
<tr>
<td>Intertextuality on Oral Discourse in Sari Matua Batak Toba Ceremony</td>
<td>Asifah Nurul Khoirot Nasution; Anni Holila Pulungan; Eddy Setia</td>
<td>287</td>
</tr>
<tr>
<td>The Effect of Mangosteens (Garcinia mangostana L) Peel to Creatine Kinase Serum in Male Rats (Rattus norvegicus) with Fatigue from Swimming</td>
<td></td>
<td>290</td>
</tr>
<tr>
<td>Analysis of Technology Utilization to Measure The Throw Distance of The Ball on Hammer Throw</td>
<td></td>
<td>293</td>
</tr>
<tr>
<td>The Interactions of Social Stratification and Karonese Register in Giving Pedah Pedah Perjabun</td>
<td></td>
<td>296</td>
</tr>
<tr>
<td>Implementation Management Training Volleyball Club of Pertamina Year 2017</td>
<td>Elkana Putra Tarigan; Amrin Saragih; Siti Aisyah Ginting</td>
<td>300</td>
</tr>
<tr>
<td>Lexical Metaphor in Printed Car Advertisements</td>
<td>Misdiana; Siti Aisyah Ginting; Amrin Saragih</td>
<td>308</td>
</tr>
<tr>
<td>Improving Students’ Reading Comprehension Ability In Descriptive Text Through Flashcard</td>
<td></td>
<td>309</td>
</tr>
<tr>
<td>The Role of Teacher’s Training Model and Technological Approach to the Improvement of Teachers’ Professionalis</td>
<td>Intan Sufiah Batubara</td>
<td>312</td>
</tr>
<tr>
<td>The Difficulties of Students at the Second Year of St.Thomas 3 Senior High School Medan in Translating English Idioms into Indonesian</td>
<td></td>
<td>315</td>
</tr>
<tr>
<td>The Effect Of Applying The Great Wind Blows Strategy On The Students’ Vocabulary Mastery</td>
<td>Fitri Susi Sinurat</td>
<td>321</td>
</tr>
<tr>
<td>Attitude of Examiners in Thesis Convocation</td>
<td>Mara Sutan Siregar</td>
<td>325</td>
</tr>
<tr>
<td>Politeness Strategies in Mandailing Wedding Ceremony</td>
<td>Nurun Nazipah Harahap; Fatma Raudah Siregar</td>
<td>329</td>
</tr>
</tbody>
</table>
The Development of Interactive Learning Media of Athletic on Physical Education in SMP Negeri 15 Medan

Akhmad Khaidir¹
SMP N 15 Medan¹
Medan, Indonesia
ahmadkhaidir369@gmail.com¹

Budi Valianto², Tarsyad Nugraha²
Fakultas Ilmu Keolahragaan Universitas Negeri Medan²
Medan, Indonesia²
valiantobudi@gmail.com²
cats.nugraha@gmail.com³

Abstract —This study aims to design and develop interactive multimedia-based learning media on athletic materials on the subjects of Physical Education that is suitable for use in learning. The development model that is used to developed learning media device in this research is Borg and Gall model which is used to produce a product. The product was an athletic learning media based on interactive learning media. This research was conducted at SMP Negeri 15 Medan. The data analysis technique is done by using quantitative descriptive analysis technique, that is by analyzing quantitative data. The research data was obtained from validation of media questionnaire by media material expert, media validation questionnaire by media expert, teacher perception questionnaire on interactive multimedia usage, and student perception questionnaire on interactive multimedia usage. Learning media in this research is shaped in adobe flash product. At the development stage, media and materials experts conduct small group trials aimed at testing media feasibility. Media validation questionnaires earned a percentage in very feasible categories. The teacher perception questionnaire and the students' perception questionnaire on the used of interactive multimedia gained a percentage in a very feasible category. It can be concluded that interactive learning media on athletic material was feasible and can be used on the subjects of Physical Education.

Keywords –development; interactive learning media; physical Education; athletic

I. INTRODUCTION

Today, Information and Communication Technology (ICT) is experiencing rapid development. These developments have an unavoidable impact of course. The impact requires innovation and creativity in various ways, one of them in the world of education. Therefore it is not a difficult thing anymore to find the use of ICT in the world of education. The existence of ICT use policies requires teachers to be able to use the media in their learning, the existence of integrated learning with ICT becomes a necessity in the 2013 curriculum, the teacher must be able to use the media in learning.

Athletics is one of the Physical Education subjects that must be given to students ranging from elementary school to high school level, in accordance with Minister of Education and Culture Decree No. 0413 / U / 87. There are many obstacles and obstacles so that athletics are liked and liked by students or can even excel in one of the race numbers at the student level. One of the obstacles that is often encountered in the field, among others, is the lack of availability of facilities and equipment for adequate athletic activities.

Another problem is the ability of the teacher in presenting the athletic teaching and learning process which emphasizes more on mastering the technique and oriented to the results or achievement of students in each athletic number.

From the background above can be identified various problems found in the field as follows:

1. Limitations of teachers in demonstrating athletics to students due to physical limitations.
2. It takes media to make it easier for students to understand the material.
4. It is necessary to balance the use of computer-based learning media for all subjects including Physical Physical Education and Health.
5. The demands of modernization in the world of education that continue to strengthen make it necessary to have a breakthrough in the learning system
6. Encourage students to follow the development of information and communication technology, especially in the learning process.

The purpose of this learning media development research is as follows:

1. Produce athletic interactive multimedia in Health Sports Physical Education subjects that are suitable for use in learning.
2. Knowing the effectiveness of the use of interactive learning media for athletic material in Sports Physical Education subjects.
II. THEORETICAL STUDY

A. Learning

For a student learning is an obligation. Success or failure of a student in education depends on the learning process experienced by the student. Sardiman A.M. (2004: 20), that learning is a change in behavior or appearance with a series of activities.

From the description above it can be concluded that learning is a business process carried out by students to obtain a new behavior change as a whole, intentionally, consciously and these changes are relatively permanent and bring positive influence and benefits for students in interacting with their environment. While learning is a series of activities in which there are students who are learning and assisted by teachers who create environmental conditions that support the ongoing learning process.

Learning is the process of interacting students with educators and learning resources in a learning environment. Learning is assistance provided by educators so that knowledge and knowledge acquisition, mastery of skills and character can occur, as well as the formation of attitudes and beliefs in students.

B. Physical Education Learning

Physical education of sports and health as part of general education in schools that aims to develop aspects of physical fitness, movement skills, critical thinking skills, social skills, reasoning, emotional stability, moral actions, aspects of a healthy lifestyle and recognition. Sports physical education and health traditionally have goals that are in line with education in general. According to Charles Bucher quoted by SoenardiSoemosasmito (1988: 5), that physical education in sports and health is an integrated part of a comprehensive educational process; the fields and targets that are pursued are physical, mental emotional and social development for healthy citizens, through a medium of physical activity. From the above definition it can be concluded that physical education and sports subjects are an integral part of the overall education system that utilizes physical activity which aims to improve the individual's organic, perceptual, emotional, neuromuscular within the framework of national education.

C. Physical Education Learning

Athletics comes from the Greek language, that is athlon or atum which means match, race, struggle or struggle. While people who do are called athletes (athletes). Thus it can be stated, that athletics is a sport that is contested or competed which includes road numbers, running, jumping and throwing.

D. Instructional Media

According to Heinich, (1993) media is a communication channel. Media comes from Latin and is the plural form of the word "medium" which literally means "intermediary" which is the intermediary of the source of the message (a source) with the receiver of the message (a receiver). Heinich cited this media as films, television, diagrams, printed materials (printed materials), computers, and instructors.

Based on theoretical studies, relevant research and the framework of his thinking, the hypothesis in this study is

1. Athletic material for Interactive Learning Media in Sports Physical Education subjects is suitable for use in Class VII SMP 15 Medan.
2. Interactive Learning Media Athletic material is effective to be used in athletic learning long jump numbers show higher student learning outcomes.

III. METHODOLOGY

A. Development Model

The development model that will be used to develop learning media tools in this study is the Borg and Gall model. This development model version of Borg and Gall (1989: 784-785) includes ten activities, namely: (1) preliminary study, (2) research planning, (3) initial product development (4) initial (limited) field trials, (5) revision of limited field test results (6) wider field test (7) revision of field test results (8) due diligence. (9) revision of the results of the feasibility test. (10) dissemination and dissemination of final products.

The reason for using this development media is when viewed from the procedure written that each stage in this media is very concerned about the needs and real situation in a systematic school. This development media is used to produce interactive multimedia products for ball game baskets that are suitable to be used in the learning process of physical health sports education.

REFERENCES

