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Exploring Multimedia-Based Active Learning Pedagogy: An Empirical Research

Arsyad Abdul Gani
Universitas Negeri Jakarta, Indonesia.
Correponding author: arsyad.gani@gmail.com

Nurdin Ibrahim
Universitas Negeri Jakarta, Indonesia.

Khaerudin
Universitas Negeri Jakarta, Indonesia.

Mifedwil Jandra
Universitas Ahmad Dahlan Yogyakarta, Indonesia.

Miftachul Huda
Universiti Pendidikan Sultan Idris, Malaysia.

Andino Maseleno
Universiti Tenaga Nasional, Malaysia.

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Abstract:
This study attempts to examine the learning achievement with multimedia assistance in the process of knowledge transfer, in the sense that implies into the teacher as the instructor becomes the mentor to give the direction among the students to achieve their abilities and skills. This study uses quasi-experiments in the classrooms that are already available without any changes to the classroom situation and learning schedule (intact class). The collected data were analyzed using descriptive and inferential data analyses. The finding reveals that there is a significant difference between the outcomes of learning with multimedia and those with conventional media on integrated social studies. Learning integrated social studies with multimedia provides significant improvement in students' learning outcomes. This is because multimedia can provide more opportunities for both teachers and students to create better classroom atmosphere, gain effective multi-purpose communication, and have a more interesting and lasting learning experience. In other words, multimedia can provide more spaces for developing creativity and innovation that can elevate students' spirit and enthusiasm in learning.

Keywords: *active learning, multimedia, communication, creativity and innovation, and spirit and enthusiasm in learning NFC; smartphones.*

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1. INTRODUCTION

A professional teacher is required to have various competencies, as mandated in Republic of Indonesia Law No. 14 of 2005 concerning Teachers and Lecturers. Teachers as initiators of change in the midst of society are required to master pedagogical, personal, social, and professional competencies, all of which should be obtained through professional education and trainings. Therefore, teachers must try to assume great responsibility for learning and making their students learn in order to improve the students' knowledge and experiences. As the agents of learning teachers do not only teach and educate their students, but also need to have the ability to choose a variety of learning resources appropriate to help develop the students' potential effectively and efficiently.

In essence the learning process is a communication process that must be created or realized through delivery activities and exchanging messages or information by each teaching staff with students. Message or information can be in the form of knowledge, skills, skills, ideas, experiences, and so on. In order to avoid misguidance or ambiguity in the communication process it is necessary to use facilities called the media. In the teaching and learning process, the media used to facilitate teaching and learning communication is called learning media.

Many studies have been conducted in relation to the use of learning media in encouraging effective learning processes. For example, Learning Landscapes Journal explores the role of media in supporting classroom learning in today's digital world. Some researchers (Butler-Kisber, 2013; Foulger et al., 2013; Hicks et al., 2013) conclude that the use of online media are important for teacher self-development so that it has the potential to help teachers plan, implement, and evaluate learning better. Foulger et al. (2013) invites teachers to use social media in the learning process. Hicks, Turner, and Stratton (2013) initiated writing learning with digital storytelling. Cho, Ro and Tobias (2013) examined the role of twitter. Twitter and similar technologies will support the growth of teacher professionalism through online collaboration and support. Teachers can exchange information, claims, theories and practices as well as teaching materials that support their professional assignments in class.

The results of other studies by Lim, Zhao, Tondeur, Chai, and Tsai (2013) reveal that adaptation to the application of technology in learning is influenced and inhibited by various factors such as conditions related to school technology resources, school culture, readiness and experience of teachers and students in using technology and the dynamics of social interaction in schooling systems.

Teachers in the city of Mataram in fact often find difficulties in choosing and using learning media, methods and strategies that are considered the most appropriate for delivering or discussing lessons. It is hard for them, for example, to select a method that supports lesson delivery to make learning more active, innovative, creative, educative, fun, joyful, and substantial. A study of the use of media by Siti Sanisah (2013) among 100 social studies teachers conducted in the city of Mataram concluded five main things, namely: (1) 55% of teachers used the media in social studies learning. (2) 23% of teachers have made their own learning media (teachers made media). (3) 97% of teachers use teaching aids that are available at school (ready-made media). (4) 12% of teachers use video and television media (audio-visual media), and (5) 9% of teachers use media computers and LCD projectors.

The results of my preliminary observations (Arsyad, 2014) at several junior high schools in the city of Mataram showed that Social studies

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(IPS) subject teachers often faced various obstacles in delivering learning material, especially in choosing the media to be used. Moreover, social studies in junior high school are non-exact subjects that should be delivered in an integrated manner as they consist of history, geography, and economics. Social studies by most teachers are considered quite complex and require a comprehensive understanding of all sub-subjects. The breadth and variety of this material require hard work on the side of teachers, in terms of choosing interesting media to avoid boredom on the side of students. One of the strategies is to use electronic media (video / multimedia). The difficulties of teachers in delivering subject matter in an integrated manner will certainly continue if the teachers only use conventional media. Indeed, teachers should be innovative in their teaching in order to increase students' interest, passion, and understanding of the lessons. Thus, this study attempts to examine the learning achievement with multimedia assistance in the process of knowledge transfer, in the sense that implies into the teacher as the instructor becomes the mentor to give the direction among the students to achieve their abilities and skills.

2. LITERATURE REVIEW

2.1. About Learning

According to Smaldino, Lowther, and Russell (2012) learning is the development of new knowledge, skills or attitudes as a result of one's interactions with the environment. In other words, learning is a mental / psychological activity that takes place in active interactions with the environment which results in changes in knowledge, skills, and attitudes. The change is obtained through effort settled in a relatively long time as the result of experience. According to Oemar Hamalik (2007) learning is a process of changing behavior due to practice and experience. According to Abdurrohman Gintings (2008), learning is a planned experience that brings changes in behavior.

Learning is the process of communication between learners, instructors, and teaching materials. Learning is a combination composed of human, material, facilities, equipment, and procedures that influence each other to achieve learning goals. Humans involved in the learning system consist of students, teachers, and other personnel, such as laboratory staff and librarians. Materials include books, blackboards, chalks, photographs, slides, and films, audio and video tapes. Facilities and equipments consist of classrooms, audio-visual equipment, as well as computers. Procedures include schedules and methods for delivering information, practice, learning, examinations and so on.

Sadiman, Rahardjo, Haryono, and Rahardjito (2012) state that learning is essentially a communication process, that is, the process of delivering messages from the message sources to their recipients through certain channels or media. For that the communication process must be created and realized through the activities of delivering messages, exchanging messages or information from each teacher to the learner or vice versa. The learning system can be implemented by reading books, studying in class, or at school. Learning is also colored by the organization and the interaction between various interrelated components to achieve certain results.

Based on the above description, it can be concluded that learning outcomes are the final ability derived from repeated process of recognition. Learning outcomes will be stored for a long time or will not even disappear forever because the learning outcomes contribute to the formation of one's personality that always want to achieve better results. Because of that learning outcomes can change the way of thinking and produce better work ethic.

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2.2. Social Studies Learning

Social studies, which are often abbreviated as IPS, refer to a subject matter that examines various disciplines of social studies and humanities as well as basic human activities that are packaged scientifically in order to provide insights and deep understandings to students, especially at the elementary and secondary levels (Susanto, 2013). These studies study cover a variety of social, economic, psychological, cultural, historical and political lives, all of which are studied in the so called social studies.

Social studies education which is now known as integrated social studies constitute a main subject taught at the level of primary and secondary education. Integrated social studies are the combination of social and human related subjects that include anthropology, economics, geography, history, law, philosophy, political science, sociology, religion, and psychology. The main objective of integrated social studies is to help develop students' overall abilities and insights on various social and humanitarian aspects (humanities). But according to the level of development, junior high school students have not been able to understand and solve social problems in their community in-depth and intact way. Therefore, integrated social studies instruction in junior high school is intended to provide students with knowledge, skills, and examples of attitudes to deal with social life challenges. In addition, it is hoped that through integrated social studies instruction students will be able to develop the ability to think logically and critically in solving problems that occur in society.

Integrated social studies learning at 8^{th} grade of SMP / MTs in 1^{st} semester is directed at mastering competency standards that concern with: (1) understanding social problems related to population growth, (2) understanding the national awakening process, (3) understanding social deviation problems, and (4) describing the relationship between scarcity of resources and unlimited human needs (National Educational Department [Depdiknas], 2014). Social studies are very important because the material obtained by students in schools can be developed into something more meaningful when students are in the community both now and in the future. The students with different social status and conditions will certainly face different problems in the course of their lives.

From the understanding of integrated social studies and learning outcomes described above it can be concluded that the outcomes of integrated social studies learning are optimal changes in the aspects of cognitive, affective, and psychomotor the students obtained upon learning integrated social studies. Students learn by looking for various kinds of information needed to achieve maximum results in the form of changes in behavior, knowledge, and skills. Thus, students are able to solve social and human problems in their lives.

2.3. Instructional Media

The term learning media comes from the word media and learning. The word media is a plural form of the word medium which means "intermediary." Then the term "media are used as a name for all forms and channels that are used in the process of delivering information or messages from the source (the message giver) to the recipient of the message" (Sadiman et al., 2012). Thus, the media includes all forms and channels that can be used in the process of presenting information. Media information includes film, radio, recordings, photos, audio visuals, printed materials, and so on. All communication media are considered learning media if they are used to carry information or messages for learning purposes (Heinich, Molenda, & Russel, 1993).

Learning media or educational media were initially interpreted as learning or teaching aids.

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But along with the development of learning technology, the notion of learning media has also evolved and becomes broader than just tools or teaching aids. Degeng (1989) views "learning media as a component of the strategy for delivering messages to the learners, whether it is in the form of people, tools or materials." Anitah (2008) states that human experience is described as a cone, which starts from direct experience to the most abstract experience that is learning through the symbol of words based on the assumption that if the learning experience is more concrete then the results achieved will be higher.

According to Ibrahim, Sihkabuden, Suprijanta, and Kustiawan (2000), learning media are everything that can be used to channel messages (learning material), so that it can stimulate the attention, interests, thoughts and feelings of learners to achieve certain learning goals. Learning media are simply all forms and channels that can be used in the process of presenting information. These include printed materials, teaching material books, and textbooks. All of these media can be referred to as learning media or educational media since they are used to carry learning information or messages. Learning media constitute a component of the strategy of delivering messages to the learners. Meanwhile, Miarso (1984) states that learning media cover everything that can be used to stimulate learners' mind, feelings, attention, and willingness.

So, learning media can make learning an active process and motivate learners to learn according to their interests and abilities. In other words, learning media make the learning process more effective and have positive impacts on learning gain.

2.4. Learning with Multimedia

Munir (2015) defines multimedia as a combination of three message design elements, namely sound, images, and text. Munir further explains that learning with multimedia occurs when students receive information through multimedia, such as in the format of message design, a blend of images, and words which are all presented in the same time and place.

Multimedia are a product of digital technology advances. These media are able to provide a rich learning experience for their users. Multimedia can display messages and knowledge in the form of a combination or combinations of several elements such as text, audio, graphics, video, and animation simultaneously. With this capability multimedia programs can display very comprehensive information for students to learn.

Multimedia are an educational media with a very dominant audio and visual element. Therefore, multimedia can provide a clear picture of the information conveyed if the information is difficult to obtain in its original form. Multimedia are also more attractive to the audience as they are more interactive and have other advantages.

Smaldino, Lowther, and Russell (2012) presented several advantages from the application of multimedia-based learning, namely: (1) individualization, which allows the learner to control the pace and sequence of learning personally; (2) special needs, where special learners or students are at risk, a culture of various inability can be accommodated with an adjustable learning speed; (3) monitoring, because computers are able to store recordings so that they can be used repeatedly and adapted to individual student needs; (4) management of information, computers and multimedia can cover the knowledge base that continues to grow and is associated with information explosion; (5) multisensory, multimedia experiences provide a variety of learning experiences that can be used in various teaching strategies; and (6) learner participation, requires students to be active and able to maintain students to focus on the lesson.

The use of multimedia as a learning tool can be adjusted to the needs and abilities of their individual users. Currently multimedia learning programs have integrated their use with computer devices. This causes multimedia programs to be used as interactive media. A number of strategies and methods can be used to design and produce effective multimedia programs as interactive learning media. The nature of interactivity contained in the type of multimedia is that the media are able to lead the learning process into a "dialogical" nature.

The advantages and advantages of using interactive multimedia in learning include the following: (1) Learning systems are more innovative and interactive; (2) Teachers will always be required to be innovative creative in finding learning breakthroughs; (3) Able to combine text, images, audio, music, animated images or videos in a mutually supportive unit to achieve learning objectives; (4) Add learner motivation during the learning process until the desired learning goals are obtained; (5) Able to visualize material that has been difficult to explain only with conventional explanations or props; (6) Train learners to be more independent in gaining knowledge (Rusman, Kurniawan, & Riyana, 2012).

2.5. Conventional Media in Learning

As stated earlier that learning media can be classified into traditional media and digital media. Traditional media in this context is a variety of media used without the support of electronic devices or computers. In contrast, digital media are a variety of media whose use must be supported by computer devices.

Some experts suggest that conventional learning media are the same as traditional learning media. Clark and Salomon (2011) said, Gross comparisons of computers or disc technologies versus video are more conventional than they have been in the past.

Media are said to be conventional not because the media have long been known, but rather the way the teacher uses the media in learning. According to Broughton, Broughton, and Geoffrey (1994), the media are said to be traditional because learning as well as teaching is more teacher-centered, or when the teacher acts as the only source of information while students are only passive recipients (traditional view of learning media, where teachers applied such media and serve as the source of knowledge while learners serve as passive receivers). Media are called conventional if the media require students to listen carefully while learning was very much seen as under the control of the teacher (Richard, 2008). Furthermore, Biggs (1996) argues that media are said to be traditional or modern when fulfilling conditions such as encouraging students to think higher. Owusu Koranteng Seth (2009) in his research report limits that conventional learning media cover such things as chalk, charts, models, textbooks, posters, realia, and models. Although not classified as the latest media, traditional media remains popular to be used as a learning resource. For example, the rapid development of digital technology does not affect the use of printed teaching materials as a learning resource. This is because books, for example, have the potential in the form of random access, which facilitate users to quickly select the section or chapter they want to learn.

Based on the above description, the use of learning media can be synthesized as the activity of using various strategic components to deliver learning materials so as to stimulate the attention, interests, thoughts and feelings of learners in order to achieve certain learning goals. Regardless of their types and characteristics, media as stated by Smaldino et al. (2012) have to fulfill the following indicators: (1) in line with standards, results and

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objectives (instructional goals); (2) latest and accurate information in accordance with the subject matter (instructional content); (3) language that matches age; (4) level of interest and involvement; (5) technical quality; (6) cheap and easy to use; (7) free of bias; and (8) there are clear usage guidelines (instructions).

3. METHODOLOGY

This study aims to identify the differences in the outcomes between learning with multimedia and with conventional media on integrated social studies among 8th grade students at State Junior High School 13 Mataram. The approach used in this study is quantitative comparative research with quasi experimental research methods using treatment factorial 2 x 2. The type of experimental research design used was quasi experimental to test the differences in the outcomes between learning with multimedia and learning with conventional media on integrated social studies. This study uses quasi-experiments in the classrooms that are already available without any changes to the classroom situation and learning schedule (intact class). As a special treatment students in the experimental classrooms were taught using multimedia, while students in control classrooms were taught with conventional media.

This research sample consists of 108 out of 224 8th grade students at SMP Negeri 13 Mataram. The sample was equally divided into two groups, experimental and control groups, each of which has 54 members. Students from each group came from two randomly selected classrooms. In the final stage of the research treatment, all sample students were given a test to measure their learning outcomes. They were tested using the same test at the same time with the same duration of 40 minutes.

The collected data were analyzed using descriptive and inferential data analyses. Data analysis with descriptive statistics is presented in the form of frequency tables, histograms, steam and leaf or box plots. Meanwhile, inferential statistical analysis was conducted according to the hypothesis.

4. RESULTS AND DISCUSSION

This research is an experimental in nature, employing hypotheses testing. The 2 x 2 factorial analysis techniques are used to test hypotheses regarding the average differences between sample groups. The criteria for testing the average influence are presented as follows:

H_o : $F_{cal} \leq F_{table}$ (there is no difference or influence)

H_1 : $F_{cal} > F_{table}$ (there are differences or influences)

The testing for the effect of interaction is shown below:

H_o : $F_{(AB)} \leq F_{table}$ (there is no significant interaction)

H_1 : $F_{(AB)} > F_{table}$ (there are significant interactions)

The hypothesis testing in this study was carried out using Analysis of Two-Way Variance (ANOVA) with the same cell. The results of the calculations that have been made are presented in the following table:

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Table 4.12: Summary of Analysis of Two-Way Variance with Equal Cells

Source	SS	dF	MS	F-cal	F-tab	Solution
Learning media (A)	172,79	1	172,79	9,06	3,94	Reject H0
Learning style (B)	253,72	1	253,72	13,31	3,94	Reject H0
Interaction (AB)	83,25	1	83,25	4,37	3,94	Reject H0
Error	1982,52	104	19,06	-	-	-
Total	2492,29	107	-	-	-	-

With reference to the above table (Table 4.12), average testing criteria, and interaction, some conclusions can be drawn as follow: In learning media (A) H0 is rejected. There are differences in the effects of learning media on learning outcomes evidenced in the difference between results of learning with multimedia and learning with conventional media. In other words, students taught with multimedia have different learning outcomes from students taught with conventional media; learning achievement of students treated with multimedia is better than ones treated with conventional media.

5. DISCUSSION

There are differences in learning outcomes between students taught with multimedia and students taught with conventional media. This is concluded based on the results of data analysis using ANOVA test which show that F-calculation (9.06) > F-Table (3.94) with a degree of freedom (0.05), and if you look at the average score of student learning outcomes taught with multimedia for 36.93 and the average score of student learning outcomes taught conventionally is 34.40. This means that in general the learning outcomes of students who are taught with multimedia are better than the learning outcomes of students who are taught with conventional media. It can be concluded, therefore, that the hypothesis that reads, "The outcomes of learning with multimedia are better than the outcomes of learning with conventional media on integrated social studies" is evidenced to be true.

The finding confirms Suyanto (2004)'s statement that multimedia, being a combination of guidance, sound, and movement, are able to attract students' interest to learning. Teachers have more opportunities to design varied activities of learning that cannot be created with conventional or traditional media. Computer Technology Research (CTR) shows that people are only able to remember 20% of what is seen and 30% of what is heard. But people can remember 50% of what they see and 80% of what they see and hear all at once. Smaldino et al. (2012) also explain some facts about how big the role of multimedia in supporting effective learning. In this case the teachers can do 5P, namely preview, prepare the environment and equipment (preparation), prepare teaching materials (programs), plan learner involvement (participation), and provide a learning experience (Smaldino et al., 2012). Proponents of multimedia state that if various sensory media are combined, the effect produced exceeds the sum of the parts and it is better than traditional learning. Other opinions are even more assertive that the use of multimedia in learning promises a wider impact than the use of traditional learning as long as the multimedia used is

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properly and appropriately chosen, designed, and used (Duhaney, 2010). Duhaney further argues that the use of multimedia provides an opportunity for both teachers and students to create conducive classroom atmosphere, effective multi-purpose communication, and a more interesting and lasting learning experience. Teachers will be more creative and innovative in an effort to arouse students' enthusiasm in learning.

6. CONCLUSION

Based on the findings and discussion, the conclusion can be drawn that there is a significant difference between the outcomes of learning with multimedia and those with conventional media on integrated social studies among 8th grade students at SMPN 13 Mataram. Learning integrated social studies with multimedia provides significant improvement in students' learning outcomes. This is because multimedia can provide more opportunities for both teachers and students to create better classroom atmosphere, gain effective multi-purpose communication, and have a more interesting and lasting learning experience. In other words, multimedia can provide more spaces for developing creativity and innovation that can elevate students' spirit and enthusiasm in learning.

IMPLICATIONS

The results of the study have at least two implications—changes in teaching paradigm and teaching creativity and innovation. First, the changes in the teaching paradigm for integrated social studies teachers should consider the quality and quantity of multimedia use. As teaching and learning activities require multimedia, the teachers are demanded to be more creative and innovative in selecting the appropriate media to support their lesson deliveries. At the same time school management should have a comprehensive plan regarding the provision of the multimedia, such as how classrooms are equipped with adequate multimedia, how teachers are made keen of the media use, and how parents and communities around school support the implementation of multimedia assisted learning for their children at school.

SUGGESTIONS

Based on the findings, conclusions, and implications of the research described earlier, the following suggestions are worth considering:

1. As for integrated social studies teachers, they need to seek for more opportunities and challenges to use appropriate multimedia in to deliver their lessons. The selection of the multimedia should consider their suitability with teaching materials or contents, characteristics of the topic or topics being presented, students' age, and other characteristics that enable students to really focus and enjoy learning.
2. The teachers are demanded to use multimedia proportionally and functionally. Media should function as a learning aid and optimal involvement of students is needed. For this reason, teachers should be able to manage their classroom in such a way that focuses on students' activities, rather than teacher's activities, according to the principle of student-centered learning.
3. As for the school management or principalities, they should provide adequate budget for the school to provide better multimedia as well as other facilities that can adequately serve the needs of teachers and students to improve the quality of academic process and outcomes at the school, which ultimately improve the quality of national education.

REFERENCES

[1] Anshari, M., Almunawar, M. N., Shahrill, M., Wicaksono, D. K., & Huda, M. (2017). Smartphones usage in the classrooms:

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ISSN: 0193-4120 Page No. 4311 - 4321

Learning aid or interference?. Education and Information Technologies, 22(6), 3063-3079.

[2] Arsyad, A. (2014). Media pembelajaran [Instructional Media]. Jakart: Radja Grafindo.

[3] Al-Sanaky, H. (2011). Media Pembelajaran Buku Pegangan Wajib Guru Dan Dosen [Learning Media A Handbook for Teachers and Lecturers]. Yogyakarta: Kaukaba Dipantara.

[4] Anderson, R N. (1986). Pemilihan dan Pengembangan Media untuk Pembelajaran [Selection and Development of Media for Learning]. Jakarta: Rajawali Pres.

[5] Anitah S. Media Pembelajaran. (Surakarta: LPP UNS dan UNS Press, 2008)

[6] Biggs, J. (1996). Assessing learning quality: Reconciling institutional, staff and educational demands. Assessment and Evaluation in Higher Education, 21 (1) 5–15.

[7] Broughton, Broughton, and Geoffrey. (1994). Teaching English as a Foreign Language. London: Routledge.

[8] Butler-Kisber, L. (2013). Teaching and learning in the digital world: possibilities and challenges. Learning Landscape, 6(2), 1-424.

[9] Cho, V., Ro, J., & Littenberg-Tobias, J. (2013). What Twitter will and will not do: Theorizing about teachers' online professional communities. Learning Landscapes, 6(2), 45-62.

[10] Degeng, I. N. S. (1989). Desain pembelajaran: teori dan praktek. [Learning design: theory and practice] Malang: Penyelenggaraan Pendidikan Pascasarjana Proyek Peningkatan Perguruan Tinggi IKIP Malang.

[11] Departemen Pendidikan Nasional. (2004). Silabus Pendidikan IPS Terpadu Jenjang SMP/MTs [Integrated Social Sciences Education Syllabus for Middle School (MTs)]. Jakarta: Pusat Perbukuan.

[12] Duhaney, D. C., & Zemel, P. C. (2000). Technology and the educational process: Transforming classroom activities. International Journal of Instructional Media, 27(1), 67-72.

[13] Gintings, A. (2008). Esensi Praktis: Belajar dan Pembelajaran [Practical Essence: Learning and Learning]. Bandung: Humaniora.

[14] Hamalik, O. (2010). Kurikulum dan Pembelajaran [Curriculum and Learning]. Jakarta: Bumi Aksara.

[15] Heinich, R., Molenda, M., & Russel, J.D. (1993). Instructional media and the new tec. instruction. New York: John Wiley and Sons.

[16] Hicks, T., Turner, K., & Stratton, J. (2013). Reimagining a writer's process through digital storytelling. LEARNing Landscapes, 6(2), 167-183.

[17] Ibrahim, Sihkabuden, Suprijanta, and Kustiawan, U. (2000). Perencanaan Penggunaan Media Pembelajaran [Planning for the Use of Learning Media]. Surabaya: Universitas Negeri Malang.

[18] Kuzu, A. (2007). Views of pre-service teachers on blog use for instruction and social interaction. Online Submission, 8(3), 34-51.

[19] Lim, C. P., Zhao, Y., Tondeur, J., Chai, C. S., & Tsai, C. C. (2013). Bridging the gap: Technology trends and use of technology in schools. Journal of Educational Technology & Society, 16(2), 59-68.

[20] Miarso, Y. (1984). Teknologi Komunikasi Pendidikan [Educational Communication Technology]. Jakarta: CV. Rajawali

[21] Munir. (2015). Multimedia: Konsep dan Aplikasi dalam Pendidikan [Multimedia: Concepts and Applications in Education] Bandung: PT. Alfabeta.

[22] Hamalik, O. (2007). Dasar-dasar Pengembangan Kurikulum [Basics of Curriculum Development] Bandung: Remaja Rosda Karya.

[23] Owusu, S. K. (2009). Instructional Media As A Tool For Ensuring Quality Teaching and Learning for Pupils In The Junior High Schools: Selected Schools In The Kumasi Metropolis. Ghana: Doctoral Dissertation.

[24] Richard, E.C. and Salomon, G. (2011). Media in Teaching. New York: University of Southern California Press.

[25] Richards, J. C. (2008). Communicative Language Teaching. Retrieved from http://www.phil.muni.cz/elf/mod/resource/view.php?inpopup=true&id=88013 (accessed on 11 May 2019).

November-December 2019
ISSN: 0193-4120 Page No. 4311 - 4321

[26] Rusman, Kurniawan, D. and Riyana, C. (2012). Pembelajaran Berbasis Teknologi Informasi dan Komunikasi: Mengembangkan Profesionalitas Guru [Information and Communication Technology Based Learning: Developing Teacher Professionalism] Jakarta: PT. RadjaGrafindo Persada.

[27] Sadiman, A.S., Rahardjo, S., Haryono, A., and Rahardjito. (2012). Media Pendidikan: Pengertian, Pengembangan dan Pemanfaatannya [Media Education: Definition, Development and Use] Depok: Rajawali Press.

[28] Sadiman, Arif. (2011). Media Pembelajaran [Learning Media]. Jakarta: PT. Radjagrafindo Persada.

[29] Sanisah, S. (2013). Evaluasi Penggunaan Media Pembelajaran pada Mata Pelajaran IPS Jenjang SMP di Kota Mataram [Evaluation of the Use of Learning Media in Social Sciences Subjects in Middle School in the City of Mataram] Jurnal of Education Community, I(7), 33-39.

[30] Slameto. (2003). Belajar dan Faktor-faktor yang Mempengaruhinya [Learning and the Affecting Factors] Jakarta: Rineka Cipta.

[31] Smaldino, S.E., Lowther, D.L. dan Russell, J.D. (2012). Instructional Technology & Media for Learning. New York: Pearson Education, Inc.

[32] Susanto, A. (2013). Teori Belajar Dan Pembelajaran Di Sekolah Dasar [Theory of Learning and Learning in Primary Schools]. Jakarta: Kencana Prenada Media Group.

[33] Suyanto. (2004). Analisis dan desain aplikasi multimedia untuk pemasaran [Analysis and design of multimedia applications for marketing]Yogyakarta: Andi.

[34] Syah, M. (2001). Psikologi Pendidikan dengan Pendekatan Baru [Educational Psychology with a New Approach]. Bandung: PT. Remaja Rosdakarya.