

AL-MUDARRIS Homepag

ISSN

DOI

: journal of education, Vol. 6, No. 1 April 2023

: http://e-journal.staima-alhikam.ac.id/index.php/al-mudarris

: 2620-5831 (print), ISSN: 2620-4355(online)

: 10.32478/al-mudarris.v%vi%i.1223

Article type : Original Research Article

A Survey of Learning Media Utilization in Elementary School

Survei Pemanfaatan Media Pembelajaran di Sekolah Dasar

Ahmad Sudi Pratikno*1, Sumantri²
¹Universitas Trunojoyo Madura, Kamal, Bangkalan, Indonesia
²SDN Gadingrejo 03, Umbulsari, Jember, Indonesia
¹ahmad.pratikno@trunojoyo.ac.id, ²ssumantri04@gmail.com

Abstract

The principle objective of this research, first was to survey the need of learning media in four public schools which consist of 55 samples, second was to engage learning media which contain of environmental awareness in primary schools. This research used documentations, observations, and in-depth interviews to collect data. The data analysis used quantitative and descriptive analysis. The findings reveal that learning media in which frequently used by teachers as follows laptop and LCD (31,25%), books (62,5%), and others (6,25%), while learning media which expected or needed by students were: reality (62,5%) and multimedia (37,5%). Findings suggest that teacher might provide reality and multimedia as a learning media which contain interactive material to the students.

Keywords: survey, lerarning media, elementary school

Abstrak

Tujuan utama dari penelitian ini, pertama adalah untuk mensurvei kebutuhan media pembelajaran di empat sekolah umum yang terdiri dari 55 sampel, kedua untuk melibatkan media pembelajaran yang mengandung kesadaran lingkungan di sekolah dasar. Penelitian ini menggunakan dokumentasi, observasi, dan wawancara mendalam untuk mengumpulkan data. Analisis data menggunakan analisis kuantitatif dan deskriptif. Hasil penelitian menunjukkan bahwa media pembelajaran yang sering digunakan guru antara lain laptop dan LCD (31,25%), buku (62,5%), dan lain-lain (6,25%), sedangkan media pembelajaran yang diharapkan atau dibutuhkan siswa adalah: realitas (62,5%) dan multimedia (37,5%). Temuan menunjukkan bahwa guru dapat memberikan realitas dan multimedia sebagai media pembelajaran yang berisi materi interaktif kepada siswa.

Kata kunci: survei, media pembelajaran, sekolah dasar

INTRODUCTION

Media and citizenship education have big common topics and pedagogical characteristics (Scarratt & Davison, 2012). Recently, considerable studies have grown up around the theme of science literacy and local wisdom within schools (Chusorn, Ariratana, Chusorn, 2014; Lawless et al., 2018). Ministry of Education

49

E-mail address: ahmad.pratikno@trunojoyo.ac.id, ssumantri04@gmail.com
Peer reviewed under reponsibility of STAI Ma'had Aly Al-Hikam Malang
©2019 STAI Ma'had Aly Al-Hikam Malang, All right reserved, This is an open access article under

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

and Cultural of Indonesia has been mandated primary, secondary, and high schools to implement 2013 curriculum as a national curriculum of Indonesia. The core of this curriculum has two points, first the character education, and second the thematic learning. This current study focused on environmental awareness as one of character values. Cultivating the character values was important right now, those were because the moral degradation within the Indonesia youth generation felt concerned. In 2010, the Ministry of Education has been stated that for further strengthen the implementation of character education in Indonesian, the educational unit has been identified 18 values derived from religion, Pancasila (national ideology), culture, and national education goals as follows: religious, honest, tolerance, discipline, hard work, creative, independent, democratic, curiosity, spirit of nationalism, love homeland, rewarding achievement, friendly, love peace, joy of reading, environmental concern or environmental awareness, social concern, and responsibility (Fahmy, Bachtiar, Rahim, & Malik, 2015). Those 18 values have been implemented to create a great Indonesia generation. Subsequently, nowadays one of those 18 values such the environmental awareness was still important. Conducting survey research would support the integrated learning media within learning process.

Presented learning media was also had close relation to learning interactions in the classroom. The expansion of media now also has been a disruption in the learning process. Accordingly, to anticipate the expansion of media, utilization of media in learning process was an initiative in which could be done. Learning media presented as to reach the goals of learning. Learning process based on the curriculum need to be supported by learning media (Hidayati & Wuryandari, 2012). Utilization of learning media has been used to teach multicultural society and cultural diversity in Indonesia especially (Zulaeha, 2013). However, monotonous learning media and not interested caused student was bored quickly and dispirit in learning, subsequently the learning process will be disturbed. Additionally, learning process which maximized local potentials was still less.

Currently, the most problematic in learning media were which are commonly crucial in learning media was needed and used by teacher in primary's learning process. Developed learning media was still weak at the stage of need analysis. Those statement was based on some kinds of literature such as thesis, research article, and report paper from higher education. According to research and development model by Dick, Carey, & Carey, the first step of developing learning media was identified instructional goals (Dick, Carey, & Carey, 2015). Identified instructional goals were to determine what new information and skills that want learners to have mastered when they have completed the instruction, expressed as goals. Identify instructional goals was also referred to assess needs to identify goals. The instructional goals may be derived from a list of goals, from a performance analysis, from a needs assessment, from practical experience with learning difficulties of students, from the analysis of people who are doing a job, or from some other requirement for new instruction (Dick, Carey, & Carey, 2015, p.6). Need analysis was the fundamental step to develop learning media. In addition, through need analysis will be easier to develop learning media. Needs analysis is research designed to render decision making informed rather than conjectural and speculative (Cohen, Manion, Morrison, 2000, p.391). This

DOI: 10.32478/al-mudarris.v%vi%i.1223

research can be used as an underlying ground to develop innovative learning media which needed and appropriated with primary school's students. Need analysis could be come from interview, questionnaire, documentation, and observation. Some researchers have been done this basic step when developed an innovative learning media (Nurani, Masruhi, & Palenewen, 2016; Wahira, 2016). However, not all of researchers in Indonesia have been done with those steps.

In other side, some research about learning media has to do continuously, because the trend of learning media would change along with periods. The innovation of technology was massively made all of thing changed quickly and influenced the development of learning media in 21st century learning. Of course, the innovative learning media had to be novelty to interest for using and stimulated students in learning process. Specifically for the faculty of education had to answer the need of learning media especially in primary school. Besides the relationship with learning media, the cultivation of character values was essential to be done, particularly in 18 character values were initiated by Ministry of Education and Culture. Therefore, research about need analysis of innovative learning media was needed to re-grow the students' curiosity toward environment in its region.

Developed learning media, had better appropriated with learning materials, students' characteristic, grade, and competence which was intended to reach by student. Some research in Indonesia showed that learning media in primary school was most likely video, figures, game (Putra, Handayani, & Iqbal, 2016) and modules (Kinantan, 2017; Heriningtyas, 2017), even there was learning media only put down in the headmaster's room, teachers did not touch it anymore. The reason of teachers about the price of learning media was expensive, subsequently if the learning media used in the learning process, they worried that learning media was broken quickly.

Correlated with those statements, in several countries such as Austria (Denk, Weber, & Belfin, 2007), Macedonia (Zdravkova, 2016), China (Li & Yang, 2016), Hong Kong (Lee, 2016), Canada (Dumitrica, 2017), and USA (Elbeck & Mandernach, 2009) have been done studied about learning media many times, however little offence about environmental awareness among primary students. Learning media is one of learning media which support the success of learning process. Innovative learning media was essential to establish the target of students' achievement. The next research will be held not limited at the content of science and primary school, however, can be extended to other materials and in the higher grade. The research in future, hopefully more interested, attractive, and extended not only limited for discussion about developing learning media which emerge environmental awareness, but also wider than previous topic of interest. Furthermore, future research might be studied in which took subject of anything else and become a basic step for develop learning media.

METHODS

The purpose of this study was to identify need of learning media of the primary students among four elementary schools. A survey approach was adopted to assess the need of learning media. From those survey would promote some of innovative learning media such as movable book, pop up cards, virtual reality,

android game, and encyclopedia herbarium. Four elementary schools conducted an in-depth interview, documentation, and observation. After that promote several innovative learning media which contain of environmental awareness such as movable book, pop up cards, virtual reality, android game, and encyclopedia herbarium.

Sample of the current study was consisted of 47 primary students of the fourth grade among four elementary schools, 4 teachers of the fourth grade, and 4 headmasters. This research process begins with the determination of selected research samples using non-randomized purposive sampling technique. Sampling which has a specific purpose aligned to the goals of the investigation or survey study. These purposive as is the identification of subjects with relevant characteristics or behaviors (Newby, 2014, p. 667). The sample of primary students represented the number of fourth grade's student in one class.

Determination of the research sample was conducted based on any considerations. The considerations as follows: selected schools have accreditation A, teachers dominated by civil servants, the ratio of students and teachers are ideal (around 20-25), the results of previous year's national examinations (>80), and condition of facilities and infrastructure in elementary school.

All schools were drawn from the public sector as this educate the vast majority in Indonesia. The source of this data taken come from the following website https://sekolah.data.kemdikbud.go.id; https://sekolah.data.kemdikbud.go.id; https://bansm.or.id/sekolah; and https://dapo.dikdasmen.kemdikbud.go.id. The website is managed by the Dapodik (Educational Main Data) team from the Ministry of Education and Culture of Indonesia. In summary, described in the table below.

Table 1. Study participants

No.	School description	Respondent	Academic qualification	Teacher and student ratio	Curriculum that used; Accreditation	The average of previous score of national examinations
1.	School A	headmaster, teacher in the fourth grade the fourth grade the fourth grade	16 civil servant teachers and 8 honorary teachers	21.32	2013 curriculum; A	87.5
2.	School B	headmaster, teacher in the fourth grade the fourth students in the fourth grade	11 civil servant teachers and 3 honorary teachers	20.15	2013 curriculum; A	88.85

DOI: 10.32478/al-mudarris.v%vi%i.1223

No.	School description	Respondent	Academic qualification	Teacher and student ratio	Curriculum that used; Accreditation	The average of previous score of national examinations
3.	School C	headmaster, teacher in the fourth grade the fourth grade the fourth grade	8 civil servant teachers and 1 honorary teacher	22.3	2013 curriculum; A	84.67
4.	School D	headmaster, teacher in the fourth grade the fourth grade the fourth grade	10 civil servant teachers and 2 honorary teachers	24.85	2013 curriculum; A	80

All those elementary schools have a good infrastructure. The participating schools are described in the following explanation. First school is School A. School A is a school with good facilities and infrastructure with a total of teachers and school staffs were 24 people and 112 students. School A is located nearby city center. This school uses the 2013 curriculum. Qualifications of the civil servant are 16 teachers, 8 honorary teachers, while the number of students 112 which consists of 67 females and 45 males. The number of fourth grade students are 25 students. The ratio of teachers to students was 21.32 and the average of the national exam in previous years was 87.5.

The second school is School B. School B has 14 teachers consist of 11 civil servants, 3 honorary teachers, and 1 school staff. This school located nearby Government Official Building. There are around 114 students in this school which are 74 females and 40 males. This school uses the 2013 curriculum. Qualifications of civil servant were 11 teachers, 3 honorary teachers. The facilities provided are sufficient for the learning process. The number of fourth grade students is 24 students. The ratio between teacher and student is 20.15 while the national exam average in previous year is 88.85.

The third school is School C. The third school has completed and good facilities. This school located rather far from city center. This school uses the 2013 curriculum. Teachers consist of 1 principal and 9 teachers (8 civil servants, 1 honorary teacher). Students amounted to 98 students consist of 58 females and 40 males. The number of fourth grade students is 24 students. The facilities provided are quite supportive in the learning process. Teacher and student ratio were 22.3 while the national exam average in previous year is 84.67.

The fourth school is School D. The fourth school consists of 10 civil servant teachers, 2 honorary teachers, and 1 school staff. There are around 98 students in

DOI: 10.32478/al-mudarris.v%vi%i.1223

this school which are 64 females and 34 males. The number of fourth grade students is 22 students. The facilities provided are sufficient for the learning process. The ratio between teacher and student is 24.85 national exam average in previous years was 80. This school is likely 5 kilometers from city center.

All of research instruments have been validated by Prof. Edi Purwanta, the lecturer from Guidance and Counseling Department, Yogyakarta State University on early November 2017. The minor revision has been done to accurate and made this instrument valid. Ensuring the validity of the instrument was important to produce a high quality of research article.

Four teachers of the fourth grade were given several questions about 2013 curriculum which implemented in this current primary schools and learning media that used in learning process. Four headmasters in each primary schools were given several questions about 2013 curriculum and infrastructure in each primary schools. 47 students of the fourth grade in primary school is interviewed around learning activities and what they expected from learning media.

Furthermore, in-depth interview technique is conducted toward 1 headmaster, 1 teacher of fourth grade, and 11-12 students with good academic ability (chosen by teacher) in each school. In other words, those students have good achievement. The total respondents of this study were 55 persons. Interview questions for headmaster, teachers, and students participating in this study covered by the following areas and the thematic analyses were focused on the following categories:

Coverage of interview questions for headmasters:

- Statement about 2013 curriculum in primary school
- Challenges in applying 2013 curriculum
- Supporting the infrastructure and quality of primary school

Coverage of interview questions for teachers:

- Statement about the implementation of 2013 curriculum and the following challenges in primary school
- Used of innovative learning method or model in learning process
- Learning media that mostly used in learning process

Coverage of interview questions for students:

- Learning activities
- Environmental awareness
- Content of learning media
- Need of learning media

Those coverage of interview questions started with introduction questions, subsequently interviewer might be directed at the point of questions softly. The remaining students who did not give any questions would be given questionnaire about learning activities and preferred learning media. The questionnaire grille as a collecting data would be described at the following paragraph.

Table 2. In-depth interview grille of the need of students

No.	Indicators	Question number	
1.	Learning activities	1, 2, 3, 4	
2.	Environmental awareness	5, 6, 7, 8	

DOI: 10.32478/al-mudarris.v%vi%i.1223

No.	Indicators	Question number
3.	Content of learning media	9, 10
4.	Need of learning media	11
Total		11 items

Those in-depth interview grille divided by three indicators which determined learning media that needed by students and learning obstacles of students. An observation has been conducted with anecdote note and mechanical devices. All of scene in the classroom has been video-recorded and documented by observer with smartphone and written as an field note. The procedure of this study was chronological, first when learning process going on, the researchers recorded the learning process and write anecdote note. After that, conducted indepth interview with the students of fourth grade while giving questionnaire with the students of fourth grade. Teachers of fourth grade and headmasters are given several questions through in-depth interview.

The data analysis used quantitative and descriptive analysis. Leedy and Ormrod (2001) argued that quantitative research is specific in its surveying and experimentation, as it builds upon existing theories. The methodology of a quantitative research maintains the assumption of an empiricist paradigm (Creswell, 2003). Moreover, the descriptive analysis is conducted to account for and understand the effects of social and environmental influences on behavior as behavior—environment exchanges unfold naturally in day-to-day interactions (Martens, DiGennaro, Reed, Szczech, & Rosenthal, 2008).

This research conducted within instructional process which engage teacher and students. The data collection from teachers and headmasters would be consideration to take a conclusion. The data from students determined the current learning media that needed by students. The results of interview, observation, and documentation would be analyzed through descriptive approach and the results from in-depth interview would be analyzed by quantitative approach.

RESULTS AND DISCUSSION

This following section describes the results of this study including the description of in-depth interview, observation, and documentation.

a. Description of students' need of the fourth grade among four public schools

In-depth interview with students conducted close to break time, subsequently does not disturb the learning process. In-depth interview tends to students which have a good achievement. Choosing of several students has been done by teacher helping, these do because teacher is knowing-well about student characteristics and individual characteristics who teach. In-depth interview is going on around five minutes for each student who interviewed.

In-depth interview consists of 11 questions which has been displayed in appendix 1. For further detailed information, table 3 displays the summary of indepth interview with students.

Table 3. Results of in-depth interview with students of the fourth grade

DOI: 10.32478/al-mudarris.v%vi%i.1223

		Frequency (N = 47)	Percentage (%)	
Learning activities	Duration of study at home	Around 20 minutes	20	42.55
	every day	20-30 minutes	24	51.06
		30-40 minutes	3	6.38
	Duration of self- study every day	Around 30 minutes	10	21.28
		30-40 minutes	32	68.09
		More than 40 minutes	5	10.64
	Feeling when	Yes	44	93.62
	study in the classroom	Moderate	3	6.38
	Difficulties of	Sleepy	10	21.28
	study	Do not focus	18	38.30
		Do not like the subject	2	4.26
		Others	17	36.17
Environmental	Loving plants	Like	25	53.19
awareness		Moderate	10	21.28
		No	12	25.53
	Insight into	Know	2	4.26
	extinct and local plants	Did know	45	95.74
	Sweeping the	Yes	10	21.28
	house every day	Sometimes	12	25.53
		No	25	53.19
	Do not throw	Yes	12	25.53
	rubbish	Sometimes	25	53.19
	everywhere	No	10	21.28
Content of learning	Know about	Yes	40	85.11
media	learning media	No	7	14.89
	Learning media that frequently used by teacher	Laptop and LCD	15	31.91
		Books	25	53.19
		Others	7	14.89
Need of learning	Learning media	Reality	28	59.57
media	which expected	Multimedia	19	40.43

The data analysis used Microsoft Excel. The results of those in-depth interviews showed that learning activities by students 51,06% study at home for 20-30 minutes, 42,55% at about 20 minutes and 6,38% at about 30-40 minutes. In daily instructional, 21,28% students study around 30 minutes, 68,09% around 30-40 minutes and 10,64% more than 40 minutes. Majority of students feel happy when they study at primary school while they have difficulties of study such as sleepy (22,28%), do not focus (38,30%), do not like the subject (4,26%), and the other difficulties (36,17%).

For environmental awareness within the students of fourth grade may be increased slowly. These were because the percentage of environmental awareness

is still weak. Students who loving plants around 25%, insight into extinct and local plants 4,26%, sweeping the house every day 21,28% while do not throw rubbish everywhere 25,53%. Students mostly have been known about learning media and they give opinion about learning media which frequently used by teacher, such as Laptop and LCD (31,25%), books (62,5), and the other learning media (6,25%). In addition, the expected learning media by students are reality (62,5%) and multimedia (37,5%).

Those previous results also supported by the data from documentation, observation, and anecdote note within learning process. The overall of the results which taken from documentation, observation, and anecdote note indicated that students were happy when teacher used interactive learning media. The interactive learning media might as a reality or multimedia. Students interest with the attractive and innovative learning media. They seem like bored when teachers used book in learning process.

b. Description of in-depth interview within four teachers of the fourth grade

In-depth interview toward teacher has been done flexible and relax. It seems like a small discussion among interviewer and teacher. The duration of this interview around 15-20 minutes. Sometimes the interview talking about student characteristics, the infrastructure at the school, or something else.

The results of in-depth interview will be more detailed in the following section.

Table 4. Results of in-depth interview toward four teachers of fourth grade

No.	School	Respondent	Results
1.	School A	R1	2013 curriculum is good curriculum which has been implemented in Indonesia since 2013. The difficulties of this current curriculum are about authentic assessment which accommodates many aspects to valuate students' capabilities. Using laptop and LCD, and outdoor learning. Books.
2.	School B	R2	2013 curriculum emphasize on character education, and it is a good curriculum. However, that curriculum is difficult in the assessment process. Using Laptop; visiting library, discussion. Books.
3.	School C	R3	2013 curriculum gives a comprehensive coverage, such as thematic integrative learning, authentic assessment, and make students more religious. The challenges to implement 2013 curriculum are authentic assessment which

DOI: 10.32478/al-mudarris.v%vi%i.1223

No.	School	Respondent	Results
			cover all of students' ability, and its substance including the subject not comprehensive enough Discussion, give project, and small simulation Books.
4.	School D	R4	2013 curriculum is a good curriculum; however it has not been ready to implement in Indonesia yet. The authentic assessment process is too many aspects which might be given the score. Discussion and role play. Books.

The overall response to this curriculum was feeling difficult. However, they think that that curriculum was good curriculum to implement on education of Indonesia. Regarding the study of in-depth interview, 2 respondents used laptop and LCD in their teaching process while the other did not use laptop and LCD in their teaching process. All of respondents were using books in the learning process.

Overall, these results indicate that the implementation of 2013 curriculum was still not maximum. There were several problems and challenges that should be solved not only by teachers and headmasters, but also all of stakeholders. There must be a synergy each other to ensure that this current curriculum could give a great impact toward advancement of education in Indonesia.

c. Description of in-depth interview within four headmasters

In-depth interview toward headmasters has been conducted in the spare time. The interviewer realized that the headmasters was a busy person, subsequently the questions which given to them were a sort of question and did not focus on the learning process. The duration of each interview around 10-15 minutes.

Table 5. Results of in-depth interview toward four headmasters

No.	School	Respondent	Results
No. 1.	School School A	Respondent R5	Results 2013 curriculum is good curriculum which could be increased teachers' competence There are many books that should be prepared for learning process, those books or modules are student books and teacher books of 2013 curriculum from first grade up to sixth grade, and all of these need much money.
			The helpful effort has been received from the regency, province, and center government such school operational fund. The renovation of the school building has been proposed, presented learning media

DOI: 10.32478/al-mudarris.v%vi%i.1223

No.	School	Respondent	Results
			such as laptop and LCD, modules, and additional books.
2.	School B	R6	2013 curriculum is excellent curriculum which accommodates the cultivating of character values, however some teachers beef about the assessment system that felt too difficult. Supplying the books need a big estimate. Participating teachers who want to improve their insight into several events such conference, workshop, seminar, focus group discussion, and profession gathering. Execute classroom renovation and build the library.
3.	School C	R7	2013 curriculum is a good curriculum which first initiative by Mr. Muhammad Nuh, DEA. as the Ministry of Education and Culture of Indonesia in 2013. However, the time distance from 2013-2017 the evaluation of implementation of the 2013 curriculum still does not maximum. Fulfillment of teaching time, there must attain to 24 hours in a week. Supplying the learning support, assessing a headmasters' leadership workshop. Classroom renovation.
4.	School D	R8	2013 curriculum is a great curriculum; however, this curriculum subjected the teachers and students like a robot. They must be rating the overall of students' competence. Reporting the school operational fund which need carefulness and taking a long time. Supplying the additional books different from the main books. Classroom renovation

In summary, these results show that there are several challenges when implementing 2013 curriculum. Some of those are around authentic assessment, supplying the additional books, and manage the finances from government funding. Overall, among four headmasters have been a good effort in supporting teacher professionalism and build a good infrastructure.

The results of this study will be discussing in the following pointers. Not of all results from documentation, observation, and in-depth interview will be discussed in this research article. Several information about 2013 curriculum, students' difficulties, and infrastructure of primary school as an introduction and supporting the main discussed issues of this research article. The main issues of

this article were the need analysis of learning media and emerging environmental awareness through learning media that needed or expected by primary students.

Need analysis become the basic step whoever to develop an instructional media. As stated by Waldono (2011), that learning media should be supported by need analysis on the earlier step before developing teaching materials or learning media. For further progress, the results from need analysis would be accommodated to emerge the environmental awareness within primary students. The other way to enhance environmental awareness has been conducted by Nitecky (2015) with parents' involvement. Additionally, increased environmental awareness and ecological factors in a child's world and their impact on school performance has gained prominence, especially given the recent pressures of increased educator accountability (Downer & Meyers, 2010; Epstein, 2010; Epstein & Sheldon, 2006; Wilder, 2014).

Emerging environmental awareness within primary students come from the results of those need analysis. The results from teachers and student were matching and have been determined from teachers and students' in-depth interview. For further information, it can be seen through the diagram as follows.

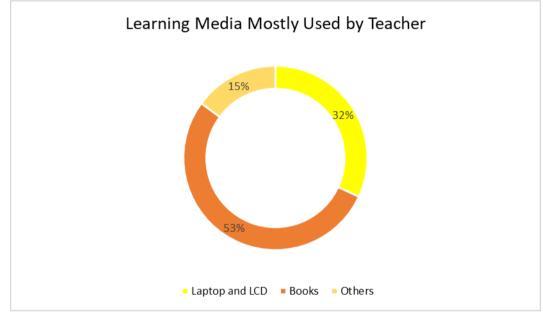


Figure 1. Percentage of learning media that mostly used by teacher

These results represent from learning media that frequently used by teacher in the classroom. A few percentages which display in the form of diagram is two numbers rounded behind a comma. The real percentage of each learning media similar with previous explanation (see table 3).

Furthermore, learning media in which frequently used by teachers include books (53%), laptop and LCD (32%), and others (15%). Based on these results could be analyzed that the use of multimedia (Laptop and LCD) and books as learning media in primary schools were dominant. Afterwards, the following diagram will display learning media which expected by students.

Learning Media Which Expected by Students

40%

Reality Multimedia

Figure 2. Percentage of learning media which expected by students

Similar with previous result on figure 1, a few percentages in this diagram is two numbers rounded behind a comma. The original results are displayed in table 3. Furthermore, the diagram shows that learning media which expected by students are reality and multimedia. If the diagram compares with previous diagram as displayed in figure 1, it can be synthesis that mostly teacher used learning media was disliked and does not prefer by students. The continuity of recent learning process can be caused the declining of learning achievement among primary students. They are bored and dispirit to join the learning process in the classroom.

Figure 2 display what is really wanted by students to present in the learning process. Those were then mentioned as follows reality (40%) and multimedia (60%). One type of multimedia is laptop combined with LCD. Laptop with an internet connection can be used to download any content to present the update information, current knowledge from the whole world at the real time. However, the barrier of internet expansion in Indonesia is the infrastructure. There is limited access in rural district and in border regions. Subsequently, presented an offline learning media such as Flash Media, Interactive Video, Lectora, or Offline Prezi can be accommodated the need of learning media in rural and border area.

Moreover, the reality media have various types such as mock-up, ritatoon, rotatoon, diorama, students indicated that they want to be teach by attractive learning media which can take their pay attention. Develop an innovative learning media also considered various issues related to the purpose of having the learning media, the target of user, the user interface, and teaching materials (Hidayati & Wuryandari, 2012). An attractive learning media can help educators in conveying the material to be covered (Muslikhah & Rahmasari, 2016) and accommodate the students' curiosity, enthusiasm, centralize their attention to the learning process.

DOI: 10.32478/al-mudarris.v%vi%i.1223

These results provide further support and suggest which are as follows:

Promote an innovative learning media such as movable book, pop up cards, virtual reality, android game, and encyclopedia herbarium which contain environmental awareness. Emerging environmental awareness is important nowadays. Keep clean, preserve the local plants, keep natural resources and Indonesia biodiversity are several things that may be a part of environmental awareness.

The results of this article also can be supported to submit a proposal to the government for the procurement process and involve classroom teachers in creating innovative learning media. The principal's expectation for the government is to provide a larger allocation of funds for the development of educational infrastructure and increase training quota as well as other activities in improving teacher quality

LIMITATIONS

The limitations of this research did not cover the need of learning media within rural and urban area and lacked hard work also highly personal approach especially in interview stage to headmaster and teacher. Developed innovative learning media might be expected the teacher to be more creative, because produce of learning media not only engaged thinking ability but also the self-diligence of teacher. In addition, this research did not explain details about how to make an innovative learning media. For further discussion about this research will be more explained in the following section.

CONCLUSION

Need of analysis about learning media is a fundamental step in developing innovative learning media. The impact will be very important considering the next stage. The findings of this survey indicate that reality and multimedia are two kinds of learning media that really needed by students. However, teachers are mostly used the book as learning media trough learning process. Therefore, teachers should provide or make reality media and multimedia to attract the students' attention. In addition, these findings can accommodate to emerge environmental awareness within primary students.

ACKNOWLEDGEMENTS

This research is a grant from the scholarship of Ministry of Education and Culture of Indonesia. The author would like to appreciate and thank for all supports of this research.

REFERENCES

Cohen, L., Manion, L., Morrison, K. (2000). *Research methods in education*. London: Routledge.

Chusorn, P., Ariratana, W., & Chusorn, P. (2014). Strategy challenges the local wisdom applications sustainability in schools. Procedia Social and Behavioral Sciences, 112(2014), 626-634.

- doi:10.1016/j.sbspro.2014.01.1210
- Creswell, J. (2003). Research design: Qualitative, quantitative and mixed methods approaches (2nd ed.). California: SAGE Publications.
- Denk, M., Weber, M., Belfin, R. (2007). Mobile learning-challenges and potentials. *International Journal Mobile and Organization*. *I*(2), 122-139. Retrieved from: http://twin.sci-hub.bz/642790766716589b2ee8b6eaf64f6e22/denk2007.pdf
- Dick, W., Carey, L., & Carey, O. J. (2015). *The systematic design of instruction* (8th ed.). New Jersey: Pearson Education.
- Downer, J. T., & Myers, S. S. (2010). Application of a developmental/ecological model to school–family partnerships. *Handbook of school–family partnerships*, 3–29. New York: Routledge.
- Dumitrica, D. (2017). Fixing higher education through technology: Canadian media coverage of massive open online courses. *Learning, Media and Technology*, 42(4), 456-467. doi:10.1080/17439884.2017.1278021.
- Elbeck, M., Mandernach, B. J. (2009). Journal for computer-mediated learning: Publications of value for the online educator. *International Review of Research in Open and Distance Learning*. *10*(3), 1-20. Retrieved 28/12/17, from: https://files.eric.ed.gov/fulltext/EJ847756.pdf.
- Epstein, J. L. (2010). School, family, and community partnerships: Preparing educators and improving schools. Boulder, CO: Westview Press.
- Epstein, J. L., & Sheldon, S. B. (2006). Moving forward: Ideas for research on school, family, and community partnerships. In C. F. Conrad & R. Serlin (Eds.), *Sage handbook for research in education: Engaging ideas and enriching inquiry* (pp. 117–138). California: Sage.
- Fahmy, R., Bachtiar, N, Rahim, R., & Malik, M. (2015). Measuring student perceptions to personal characters building in education: An Indonesian case in implementing new curriculum in high school. *Procedia Social and Behavioral Sciences*, 211 (2015), 851-858. doi:10.1016/j.sbspro.2015.11.112.
- Hadi, R., Supriyanto, & Hasanah, M. (2017). Economic learning media development based on local locality. *International Journal of Higher Education*, 6 (3), 188-194. doi:10.5430/ijhe.v6n3p188.
- Hartini, S., Misbah, Dewantara, D., Oktovian, R., A. & Aisyah, N. (2017). Developing learning media using online prezi into materials about optical equipments. *Indonesian Journal of Science Education*, 6 (2), 313-317. doi:10.15294/jpii.v6i2.10102.
- Heriningtyas, N. L. R. (2017). Developing a sainsmatika-based fairy tale book to improve critical thinking skill and curiosity for class IV elementary school students in danurejan district. (Unpublished master's thesis). Graduate School, Yogyakarta State University, Yogyakarta.
- Hidayati, N. & Wuryandari, A. I. (2012). Media design for learning Indonesian in junior high school level. *Procedia Social and Behavioral Sciences, The 3rd International Conference on E-learning ICEL 2011, 23-24 November 2011, Bandung, Indonesia, 67*(2012), 490-499. doi:10.1016/j.sbspro.2012.11.354.
- Innatesari, D., K. Setiawan, B., & Purnomo, T. (2016). Feasibility of science module with the theme of kelud mountain eruption. 4 (3), 1-7. Retrieved

- 30/12/17, from http://jurnalmahasiswa.unesa.ac.id/article/
 20425/37/article.pdf.
- Kinantan, T. H. (2017). Developing integrated thematic module based on project based learning to increase curiosity and students achievement of grade III elementary school students. (Unpublished master's thesis). Graduate School, Yogyakarta State University, Yogyakarta.
- Lawless, K. A., Brown, S. W., Rhoads, C., Lynn, L., & Newton, S. D. (2018). Promoting students' science literacy skills through a simulation of international negotiations: The GlobalEd 2 Project. *Computers in Human Behavior*, 28(2018), 389-396. doi:10.1016/j.chb.2017.08.027.
- Leedy, P. & Ormrod, J. (2001). *Practical research: Planning and design* (7th ed.). New Jersey: SAGE Publications.
- Lee, A., Y., L. (2016). Media education in the school 2.0 era: Teaching media literacy through laptop computers and iPads. *Global Media and China*, 1(4), 1-15. doi:10.1177/2059436416667129.
- Li, X., & Yang X. (2016). Effects of learning styles and interest on concentration and achievement of students in mobile learning. *Journal of Educational Computing*, 54(7), 922-945. doi:10.1177/0735633116639953.
- Martens, B. K., DiGennaro, F. D., Reed, D. D., Szczech, F. M., & Rosenthal, B. D. (2008). Contingency space analysis: An alternative method for identifying contingent relations from observational data. *Journal of Applied Behavior Analysis*, 41, 69–81.
- Muslikhah, U., Rahmasari, L. (2016). Befizel, learning physics by using puzzle as learning media innovation. *Proceedings ICTTE FKIP UNS 2015*, *1*(1). Retrieved from: https://media.neliti.com/media/publications/171258-EN-befizel-learning-physics-by-using-puzzle.pdf.
- Newby, P. (2014). Research methods for education. London: Routledge.
- Nitecky, E. (2015). Integrated school-family partnerships in preschool: Building quality involvement through multidimensional relationships. *School Community Journal*, 25 (2), 195-219. Retrieved 12/02/18, from: http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=20 16-00631-010&site=ehost-live&scope=site%5Cnhttp://enitecki@mercy.edu.
- Nurani, I., Masruhim, M. A., & Palenewen, E. (2016). Need of developing audio visual media focused on protein synthesis for senior high school. *Jurnal Pendidikan Sains*, 4(2), 45-48. Retrieved from: http://journal.um.ac.id/index.php/jps/article/download/8181/3734.
- Nurwahidah, Wilujeng, I., Senam., & Jumadi. (2017). Scientific literacy: The use of android on science instructions viewed on project based learning. In: *Proceeding of 4th International Conference on Research, Implementation, and Education of Mathematics and Science*. Yogyakarta: Indonesia. Retrieved from http://seminar.uny.ac.id/icriems/sites/seminar.uny.ac.id/icriems/files/prosiding2017/SE08_NURWAHIDAH.pdf.
- Putra, P. D. A., Handayani, R. D., & Iqbal, M. (2016). Using video game inspired baluran national park in science education: Anxiety and creative thinking skills. *International Conference on Mathematics, Science, and Education* 2016 (ICMSE 2016), 35-39.
- Scarrat, E. & Davison, J. (2012). The media teacher's handbook. New York:

Routledge.

- United Nation. (2017). *The sustainable development goals report 2017*. New York: United Nation. Retrieved from https://unstats.un.org/sdgs/files/report/2017/TheSustainableDevelopmentGoalsReport2017.pdf.
- Wahira. (2016). Need analysis of lesson planning to teach education value of Sulawesi ethnic dance teaching in primary school. *Journal of Arts Research and Education*, 16(2), 116-124. doi:10.15294/harmonia.v16i2.6733.
- Waldono. (2011). Need analysis toward the program of multimedia interactive as a learning media. *Jurnal Pendidikan dan Kebudayaan*, 17 (2), 244-253. https://doi.org/10.24832/jpnk.v17i2.21.
- Wihartanti, L., V. & Wibawa, R., P. (2017). Development of e-learning microsoft sway as innovation of local culture-based learning media. *Dinamika Pendidikan*, 12 (1), 53-60. doi:10.15294/dp.v12i1.10582.
- Wilder, S. (2014). Effects of parental involvement on academic achievement: A meta-synthesis. *Educational Review*, 66 (3), 377–397.
- Zdravkova, K. (2016). Reinforcing social media-based learning, knowledge acquisition and learning evaluation. 2nd international conference on higher education advances. 228(2016), 16-23. doi:10.1016/j.sbspro.2016.07.003.
- Zulaeha, I. (2013). Innovation models of Indonesian learning in multicultural society. *Procedia and Behavioral Sciences*, 103 (2013), 506-514. doi:10.1016/j.sbspro.2013.10.367.