ATLANTIS PRESS

Advances in Social Science, Education and Humanities Research, volume 326

3rd International Conference on Current Issues in Education (ICCIE 2018)

The Use of YouTube as a Geography Learning Source in High Schools

Ellese Sulistianingsih
Geography Education
Yogyakarta State University
Yogyakarta, Indonesia
sulistianingsihellese@gmail.com

Mukminan
Geography Education
Yogyakarta State University
Yogyakarta, Indonesia
Mukminan@uny.ac.id

***Abstract*—At present, learning source is available not only in printed books but also on the Internet, such as YouTube. YouTube has made it easy for its users to get the information needed in the form of videos. This is a survey study with exploration purpose. This research uses questionnaires to obtain the data and descriptive statistics data analysis technique to study three categories, namely (1) YouTube as learning material, (2) The easiness of using YouTube in learning, and (3) The factors supporting the use of YouTube. The results of this research show that more than half of the respondents use YouTube as a Geography learning source because YouTube is easy to access anytime and anywhere for free. YouTube also helps the respondents to understand Geography learning materials that require direct examples in the form of videos regarding to learning material. The use of YouTube is supported by the school and teachers who direct the students to use YouTube as an additional learning source in order to broaden their knowledge and help them to finish their tasks.**

***Keywords*—geography, learning source, you tube**

I. INTRODUCTION

Information and communication technology (ICT) is now developing very fast. Changes occur in seconds; they surely influence the lives of modern society. Previously, printed media such as books, newspaper, and articles are the only learning sources. Then, the progress in ICT has made it easy for the society to acquire information that they want to find, such as by accessing the Internet. The Internet has various facilities and information that can be used by the world of education in order to reach its goals and expected learning competencies.

The new technology is getting more important in the daily lives of society. ICT has produced Facebook, Twitter, Wikipedia, and YouTube. Nowadays, students can use the Internet anywhere and anytime. As a global trend [1], ICT is used to allow the students to learn, to influence traditional pedagogy [2] and teacher education [3]. In this case, teachers are encouraged to get involved in professional development to develop a broad community culture that is conducive to integrate ICT in teaching and learning [4]. It is expected that teachers will play important roles in searching, creating, and synthesizing the learning materials with new ICT tools [1].

YouTube was founded in February 2005 by Chad Hurley, Steve Chen, and Jawed Karim and can be found online at www.youtube.com [5]. It is currently one of the biggest hosts for online video contents and the third most popular website after Google and Facebook [6]. YouTube is a popular video-sharing website where users can upload, watch, and share video clips [5,7]. Moreover, people may access YouTube and create YouTube accounts for free [8]. Playlists and channels are some of the popular features which aid the reduction of search time and playback efficiency [6]. While a video is accessed, the video's rating and information about how many times the video is watched are both published. The unregistered users can watch most of the videos in the site, and the registered users have the capability to upload unlimited number of videos. This site also has several functions that make it possible to comment, annotate, and subscribe to a certain video content. The video player allows users to share video through social media outlets such as Facebook, Twitter, and Google+. It also provides shortened URL and embedded code to be used in the content and learning management system. YouTube also offers closed texts and transcript option in most of the videos. For users who upload contents, YouTube offers an integrated editing tool and option to add text synchronization and transcript to our private videos. YouTube also has another site called Test Tube in which the tools and functions are open for user testing and providing feedback [7].

In education, YouTube can be used to illustrate the subject content, to involve the students in searching for information of a project, and to inspire an innovative learning method [8]. Hartley, Palfrey, and Gasser [9] explain that in encouraging school and legislator systems to understand new technology and media; by educating children, teenagers and adults to possess digital literacy, society will start to understand and use digital resources, for example, YouTube. This is a new and innovative way that suits the generations and their learning styles. For non-traditional learners, YouTube

can provide new technology acquisition, experience, and learning format [10]. More importantly, most YouTube videos can be embedded in web-based media or other online course environments such as Blackboard or Moodle which has a huge impact on teaching and learning. Duffy [9] says that YouTube is asked to support collaborative and creative learning, and for critical assessment and personalization of information. Using YouTube in education can help students to obtain new learning experiences in using technology. YouTube can be used in several ways as learning sources to find information and as a tool that facilitates in-depth learning that supports, compares, and analyzes ideas, as well as qualifies hypothesis and carves out knowledge, where teachers have roles to stimulate discussion among the students [12].

Geography learning does not only focus on textbooks and pictures but also videos that can provide clearer pictures of the work process, such as the lava eruption from the center of magma [13]. For that reason, the use of YouTube in Geography learning can help the students to obtain dynamic, fast, the latest and, more information in the form of videos. It will surely influence the students' development by lowering the learning quality acquired and creating innovative, creative, and fun learning. High schools located in Ngaglik Sub-district have computer laboratory, Liquid Crystal Display (LCD) monitors, and internet connection. They influence the intensity of the students in accessing YouTube in schools. It can affect the students' interest in learning Geography, which can also affect the learning achievement of the students and education quality.

II. Research Method

The research method used was survey with the purpose of exploration. Survey research is defined as a group of information from an individual sample through their responses of questions [14], [15], [16]. Survey research aims to acquire information regarding to respondents as the research sample. Respondents in the population of this research made use of YouTube videos as Geography learning sources in High school located in Ngaglik sub-district, Sleman, Special Region of Yogyakarta. This research involved 227 respondents who were learners. The sample was collected by using Slovin Formula [17].

Definition I. Trust for n association rules, denoted by N belief for several population sizes, and denoted e^2 is defined as critical values (accuracy limits, significant limits such as 1%, 5%, or 10%.
Therefore,

$$n = \frac{N}{1+N\,e^2} \qquad (1)$$

Lemma I. The number of population represents sample acquired from the population multiplied by the critical value of 5% or 0.05 plus 1 (provision) and then divided by the total population.

The instrument used in this research was questionnaires containing lists of questions or statements used by the researcher to collect data from the respondents. The data were then analyzed using descriptive statistic. Descriptive statistical analysis is a number that summarizes data with the aim of describing what happened to the sample [18].

III. Result and Discussion

High school students in Ngaglik sub-district are generally familiar with YouTube. The use of YouTube as a learning source in this research is divided into three categories, namely (1) YouTube as a learning information material, (2) the easiness of learning, and (3) supporting factors for the use of YouTube. The questionnaires that had been completed by respondents were then analyzed. The statistic technique was used to turn the questionnaire results in percentages. The used formula are presented as follows [19].

Definition II. The percentages are shown by the resource for P, denoted as f frequency for each chosen answer, and denoted as n for the total.

$$P = \frac{f}{n}\ x\ 100\% \qquad (2)$$

Lemma II. The percentage of each possible answer is acquired by dividing the frequency acquired with the number of samples and then multiplied by 100% (provision).

Then, the percentage acquired is interpreted into seven categories as shown in Table I below.

TABLE I. PERCENTAGE CATEGORY

The Percentage	Category
0-1%	Does not exist
2% - 25%	Small percentage
26% - 49%	Less than a half
50%	A half
51% - 75%	More than a half
76% - 99%	Most of it
100%	Total

The results of the research data based on the survey and calculation are as follow:

TABLE II. YOUTUBE AS LEARNING INFORMATION MATERIAL

No.	Aspect	Score	Percentage	Explanation
1.	YouTube as an additional learning source to broaden students' knowledge	194	85%	Most of it
2.	YouTube as an additional learning source to finish tasks	180	79%	Most of it
3.	YouTube for searching for information or news and as an entertainment facility	143	63%	More than a half

The results of this research show that 85% of the respondents say that most of the High school students in Ngaglik sub-district use YouTube as an additional learning source to broaden their knowledge, while the other respondents say that textbooks or other learning sources are enough. YouTube to help students finish tasks is shown by 79% of respondents. It means that most of the students use YouTube as an additional learning source to help finish tasks in Geography subject. In addition to its function as a learning source, YouTube is also used as an entertainment facility by the students. It can be seen from the percentage that 63% of the students or more than half of the students use YouTube to look for information or news outside the learning subject. It is done by the students in order to acquire up to date information, so that they are not out of date. It is in accordance with Szeto and Cheng [20] who explain that YouTube can help students look for interesting topics, and it also can create environments to teach motivational scaffolding to students and certain contexts to master new knowledge that will help them to learn the next subject.

TABLE III. THE EASINESS OF USING YOUTUBE FOR LEARNING

No	Aspect	Score	Percentage	Explanation
1.	The easiness in understanding Geography learning materials	191	84%	Most of it
2.	The easiness of accessing YouTube	203	89%	Most of it

The use of YouTube makes it easy for students to understand Geography learning materials. As many as 84% of the students say that the videos from YouTube can help them deal with the difficulties in learning. By using YouTube, they can watch direct examples in videos available. Szeto and Cheng [20] explain that YouTube can help and motivate students in learning that is not only focused on classrooms. It can be seen by the results of respondents' answers regarding the ease of accessing YouTube. As many as 89% of respondents admit that accessing YouTube is a very easy thing to do since it can be done anytime and anywhere. Moreover, YouTube is free as long as there is a good internet network connection.

TABLE IV. FACTORS SUPPORTING THE USE OF YOUTUBE

No.	Aspect	Score	Percentage	Explanation
1.	School facilities	178	78%	Most of it
2.	Roles of teachers	157	69%	More than a half

School facilities are one of the supporting aspects of using YouTube in the learning process. It can be seen from the findings that most of the schools (78%) have provided a free Wi-Fi connection, computer lab, and Liquid Crystal Display (LCD) monitors that can be used by teachers and students in supporting the learning process. Most schools already have free Wi-Fi connection, even though the available Wi-Fi networks are still relatively minimal because the available and a free Wi-Fi connection can only be used in certain locations, such as teachers' room, laboratory, and several classes only.

Moreover, teacher supports is one of the supporting factors in using YouTube. As many as 69% of teachers have used videos from the YouTube to deliver their learning materials and instruct the students to download videos from YouTube as an additional learning source to broaden their knowledge and to finish their tasks. Szeto and Cheng [20] explain that to teachers, YouTube is a good learning source that can be used by students to acquire knowledge. It helps the teachers who have a role as the facilitator to guide the students in the process of acquiring the knowledge.

IV. CONCLUSION

The results of this research show that 85% of the respondents have used YouTube as a facility to look for information in order to broaden their knowledge, 79% of the respondents use YouTube as an additional learning source to finish their tasks, and 63% of the respondents use YouTube as an entertainment facility in order to get the up to date information. Moreover, 84% of the respondents say that the use of YouTube helps them understand learning materials that are hard to understand because it is easy to access. As many as

89% of the respondents say that YouTube can be accessed anytime and anywhere for free. Besides, schools and teachers support and facilitate students to use YouTube in learning processes. It can be seen from the percentage that 78% of schools already have a free Wi-Fi connection, computer laboratory, and Liquid Crystal Display (LCD) monitors that support the learning processes. Then, 69% of the respondents say that more than half of their teachers have used YouTube to deliver their learning materials and instruct the students to access YouTube as a learning source to broaden the students' knowledge and help them to finish their tasks.

The first limitation in this research is that the questionnaire is only written in Bahasa Indonesia. However, the instructor/researcher is there to help explain the problems that may be experienced by the students. The second limitation is that the survey carried out may have caused the students to exaggerate their answers. To deal with the problems, the students are told that the results of survey have to be collected and will not influence their final scores. The other limitation is the size of the sample which is relatively small, especially in terms of female students. Therefore, it is hard to make a gender comparison. Finally, the fact that all participants come from the same department does not mean that the results cannot be extrapolated to the general student population. Regarding further research, it is recommended for the researcher to use greater sample size from several departments. Then, research regarding the comparison between curricula with and without YouTube can be used as additional materials to help assess the impact of YouTube on Geography subject.

V. ACKNOWLEDGMENTS

I would like to express my special thanks to the students of Master's Program of Geography Education at Yogyakarta State University who have helped conduct the field surveys, data documentation. The greatest gratitude is for Mr. Mukminan as the research advisor, Mr. Agus and Mrs. Dwi who have provided enough information about YouTube and Geography learning sources, and students in Ngaglik sub-district High Schools as the source of information.

REFERENCES

[1] OECD. 2001. Learning to Change: ICT in Schools. Paris: OECD.
[2] Szeto, E. 2011. Transforming learning and teaching in higher education: the impact of ICT on pedagogy, peer interaction and support in a net worked virtual learning environment. The international journal of learning, 36(2), 163-174.
[3] Brown, D., and Warschauer, M. 2006. From the university to the elementary classroom: students' experiences in learning to integrate technology in instruction. Journal technology and teacher education, 14(3), 599-621.
[4] Education Bureau. 2008. Right Technology at the right time for the right task. Hong Kong: Education Bureau.
[5] Hansen, M., and Erdley, S. 2009. YouTube and other web 2.0 applications for nursing education. *Online Journal of Nursing Informatics (OJNI)*, 13(3), 1-20.
[6] Tan, E., and Pearce, N. 2012. Open education videos in the classroom: Exploring the opportunities and barriers to the use of YouTube in teaching introductory sociology. Research in Learning Technology, 19(3), 125-133.
[7] Julie A Decesare. 2014. User Uploads and Youtube One Channels for Teaching, Learning, and Research". Library Technology Reports, Vol. 50 No. 2
[8] Agazio, J., and Buckley, K. M. 2009. An Untapped Resource: Using YouTube in Nursing education. Nurse educator, 34(1), 23-28.
[9] Cayari, C. 2011. The YouTube Effect: How YouTube Has Provided New Ways to Consume, Create, and Share Music. International Journal of Education and the Arts 12 (6), 1529-8094.
[10] Burke, S. C and Snyder, S. L. 2008. YouTube : An innovative Learning Resources for College Health Education Courses. In the Proceedings of the ERIC International Electronic Journal of Health Education, 11: 39-46.
[11] Duffy, P. 2008. Engaging the YouTube Google-Eyed Generation: Strategies for Using Web 2.0 in Teaching and Learning. Electronic Journal of E-Learning, 6(2), 119-130.
[12] Clifton, A., and Mann, C. 2009. Can YouTube Enhance Student Nurse learning? Nurse Education Today, 31, 311-313.
[13] Dian Wahyuningsih and Rachmat Makmur, E-Learning: Teori dan Aplikasi, Informatika, 2017.
[14] Check J., and Schutt R.K. 2012. Survey Research. In: J. Check, RK Schutt (Eds).Research methods in education. Thousand Oaks, CA: Sage Publications, 160.
[15] Alain, P and Kenneth L. K. 1993. Survey research methodology in management information systems: An assessment. *Journal of Management Information Systems: JMIS; Armonk*, 10 (2). ISSN 07421222.
[16] Tanur, J. M. 1982. Advances in methods for large-scale surveys and experiments. In R. Mcadams, N.J. Smelser, and D.J. Treiman (eds.), Behavioral and Social Science Research: A National Resource, part II. Washington, DC: National Academy Press.
[17] Mundir, Satistika Pendidikan, Pustaka Pelajar, 2014.
[18] Thompson, C. B. 2009. Descriptive Data Analysis. Air Medical Journal Vol. 28-2.
[19] Burhan Bungin, Metode Penelitian Kualitatif, Rajawali Pers., 2010.
[20] Szeto, E., and Cheng, A. Y. 2014. Exploring The Usage of ICT and Youtube for Teaching: A Study of Pre-Service Teachers in Hong Kong. The Asia - Pacific Education Researcher. Vol. 23 No. 1.