

NEEDS ANALYSIS OF THE DEVELOPMENT OF SCHOOLGY AND POWTOON-BASED LEARNING MEDIA TO INCREASE LEARNING MOTIVATION AND STUDENT LEARNING OUTCOMES

Deni Ainur Rokhim¹, Carlina Sukma Ayu Kurniawan², Qumillaylatul Ula³, Imamul Huda Al Siddiq⁴

¹ Senior High School 3 Sidoarjo, Sidoarjo

^{2,3,4} State University of Malang, St. Semarang 5th Malang

Abstract: *This article discusses the analysis of the need to develop learning media based on Schoology and power to improve student motivation and learning outcomes. Student learning motivation will form motivation in achievement, an effort to achieve the best learning outcomes that refer to the quality standards of education. The method used is ADDIE. Data collection techniques used are using open and closed questionnaires. The data obtained were analyzed using average calculations. The results of the study are teachers and students still use conventional learning materials and rarely use information and communication technology-based media that are more in demand by students. Thus it can be seen that overall development is still needed regarding the use of mediated-based learning media especially in Schoology and Powtoon to stimulate students in increasing student motivation and learning outcomes.*

Keywords: *Learning media, schoology, and powtoon, motivation, learning outcomes*

Submitted: 16-12-2020	Accepted: 14-11-2021	Published: 02-01-2022
-----------------------	----------------------	-----------------------

¹ Senior High School 3 Sidoarjo, Email: deniainurrokhim@gmail.com

² Universitas Negeri Malang, Email: sukmacarlina6@gmail.com

³ Universitas Negeri Malang, Email: qumillalayatul@gmail.com

⁴ Universitas Negeri Malang Email: imamul.huda.fis@um.ac.id

INTRODUCTION

Developed countries must have good quality human resources, to get good quality human resources and be able to keep up with technological developments, the need for a quality education process as well. Humans can learn to be better individuals, individuals who initially do not know become aware of knowledge through education (Putri Ningrat, Tegeh, and Sumantri 2018). This makes education an obligatory part that must be taken by every human being because the essence of education is an activity that is a never-ending process.

Education in the 21st century requires students and teachers to form learning that can improve the 4c, namely collaboration, communication, critical thinking, and creativity. The four demands in learning in the 21st century are the responsibility of every education implementer. This is reinforced by the goals and functions of national education as stated in (Undang-Undang Republik Indonesia No. 20 Tahun 2003 Tentang Sistem Pendidikan Nasional 2016) Developing capabilities and shaping the character and civilization of a dignified nation in the context of educating the nation's life, aiming to develop the potential of students to become human beings who believe and fear God Almighty, have a noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens.

Today, not all educational processes in Indonesia can carry out learning that involves 4c, this is due to the expertise of teachers in teaching so that it has an impact on students who feel bored and do not have the enthusiasm to participate in learning activities. Teacher expertise in teaching is needed, especially in using learning media, because learning media is a tool that serves to convey learning messages and has a huge impact on the teaching and learning process. If the teacher does not innovate about the learning media used, then the

development of students is not as expected. The success of education is very dependent on the effectiveness of the learning process. Learning in schools can be said to be effective if the interaction between teachers and students is active. Teachers must strive optimally to foster learning motivation in students because learning motivation is one of the keys to success in achieving learning objectives. Learning motivation must grow in students so that later students can study hard and easily absorb the information provided by the teacher. (Uno 2007) states that learning motivation is an internal and external encouragement to students who are learning to conduct behavior, with several supporting indicators. These indicators include the desire and desire to succeed, the drive and need for learning, the hope of achieving future goals, the rewards given in learning,

If students do not have the motivation to learn in themselves, then this will have an impact on the learning process and learning outcomes. Reinforced by research conducted by Adiputra and (Adiputra, Sofwan, and Mujiyati 2017) 2017) regarding student motivation and achievement in Indonesia using Meta-Analysis, that learning motivation has a significant influence on student learning outcomes. Similar research was also conducted by (Ricardo and Meilani 2017) regarding the impact of interest and learning motivation on student learning outcomes. The results showed that there was a positive and significant influence on learning motivation and interest in learning on student learning outcomes which were shown either simultaneously or partially.

Based on the results of the research above, it can be seen that the learning motivation possessed by students will also have an impact on learning outcomes. If students have high learning motivation, student learning outcomes may be high and as expected. The need for a stimulus in increasing student learning motivation is carried out by teachers using learning media that utilize technology. (Budiana,

Sjafirah, and Bakti 2015) suggested that the use of learning media by utilizing ICT can support the learning process, namely it can improve the quality of learning, expand access to education and learning, assist in visualizing abstract ideas, facilitate understanding of the material, make the material more attractive. ,

The benefits of using ICT-based learning media are also proven by research conducted by (Adiko 2018) regarding the use of ICT-based learning media (Information Communication Technologies) in increasing students' learning motivation by comparing before and after using ICT-based media. The results of research by (Hidayah and Nuryanto 2010) regarding the effect of using ICT-based learning media on students' learning motivation conducted at SMAN 1 Baguntapan, revealed that the average score of 7 students became 8.5, it increased by 2.4% after using the media. ICT-based learning is carried out. (Alfansyur 2019) also researched the use of ICT-based learning media using "Kahoot" to increase student learning motivation, namely with the results that students are more enthusiastic in participating in learning because the media used is very varied and new for them. Research on the role of ICT-based learning media in increasing student learning motivation conducted by (Irsan 2019) has resulted in teachers being easier in delivering learning materials and making students more enthusiastic and interested in participating in learning activities, and students being more focused and focused in paying attention to the learning process delivered by the teacher.

The results of several studies presented regarding the use of ICT-based learning media can increase student motivation and learning outcomes. There are various kinds of ICT-based learning media that can be used during learning, one of which is Schoology and Powtoon. This study will discuss further about ICT-based learning media using Schoology and

Powtoon. Schoology is an e-learning and social networking website. The concept on the schoology website is almost the same as edmodo, but schoology has many advantages. The use of Schoology does not require hosting and can be said to be user friendly. The features of schoology are: Courses, Group Discussion, Resources, Quiz, Attendance, and Analytics. Research conducted by (Aminoto and Pathoni 2014) regarding the application of schoology-based e-learning media at SMAN 10 Jambi City, resulted that there was an increase in student learning by 34.84% from 53.43% to 82.62%. An increase in learning outcomes by 32% from 62.81% to 82.81%, and an increase in mastery in learning by 38.84% from only 14 students, to 27 students. The results of this study indicate that the use of schoology media in learning can increase students' motivation and learning achievement. 84%, previously only 14 students, became 27 students. The results of this study indicate that the use of schoology media in learning can increase students' motivation and learning achievement. 84%, previously only 14 students, became 27 students. The results of this study indicate that the use of schoology media in learning can increase students' motivation and learning achievement.

In addition to schoology, learning media that can increase students' motivation and learning outcomes is by using powtoon, because powtoon is the right medium in audio-visual learning. As stated by (One 2017) animated videos in powtoon have a variety of very interesting animation features. In addition, it is easy to be used as a medium for delivering learning materials in an interesting way, so that students are not bored with the material that the teacher conveys. The results of research conducted at MA Mathla'ul Anwar showed an increase in students' learning motivation by 12.20% from 67.86% to 80.06%. From the advantages of using schoology and powtoon media along with the results of research that has been carried out, it can be used as a reference that the use of ICT

learning media using schoology and powtoon is expected to increase student motivation and learning outcomes. Thus, the results of the learning carried out can be achieved. In this study, we will discuss further the analysis of the use of Schoology and Powtoon learning media on students' motivation and learning outcomes.

METHOD

This research is research and development or often referred to as Research and Development (R&D). The model used in this study is the ADDIE development model which consists of five stages, namely (1) Analysis, (2) Design, (3) Development, (4) Implementation, and (5) Evaluation. In this study, only three stages are used, namely Analysis, Design, and Development. This is because in this study only an assessment of the validity, and practicality of the product, did not reach effectiveness due to the limited time used in the study.

Data collection using an online questionnaire (*google forms*) to obtain data collection. The questionnaire was filled out by 16 teachers and 30 students at SMPN 1 Krembung. The type of questionnaire used is an open and closed questionnaire which aims to obtain data regarding the need for learning media based on Schoology and

Powtoon technology. From the data collected, it will be analyzed using descriptive statistical analysis techniques by calculating the average proposed by (Widoyoko 2014).

RESULTS AND DISCUSSION

The needs analysis activity for developing schoology and powtoon-based learning media to improve student motivation and learning outcomes were carried out at SMP Negeri 1 Krembung, Mojoarjunt Village, Krembung District, Sidoarjo Regency, on Monday 24 June 2019 and Tuesday 25 June 2019. The analytical activity carried out This study aims to see how big the role of learning media used by teachers is in increasing students' motivation and learning outcomes. Based on the role of the media, it will be known the need to develop learning media using ICT based on schoology and powtoon.

The results obtained from the distribution of questionnaires were carried out in two stages, namely through open questionnaires and closed questionnaires which aimed to determine the level of knowledge of teachers and students regarding the use of schoology and powtoon-based learning media.

Table 1. Results of an open questionnaire with teachers

No	Questions and Results
1	<p>Question: Have you ever used technology media in the learning process? If, yes, what is used?</p> <p>Results: a. 10 teachers have used media learning technology-based, the media used by the teacher are powerpoint, <i>google forms and youtube</i>. b. 6 teachers rarely use technology-based learning media, and tend to use books and lecture methods</p>
2	<p>Question: Are there any obstacles experienced in making technology-based learning media?</p> <p>Results: On average, teachers stated that there was a lack of adequate school facilities and some teachers were unable to use technology properly because of the age factor</p>
3	<p>Question: In your opinion, is the use of technology-based learning media very necessary in the learning process?</p> <p>Results: The average teacher suggests the need to use technology-based learning media</p>
4	<p>Question: Have you ever received training on technology-based learning media?</p> <p>Results:</p>

Only 3 teachers have received training on technology-based learning media	
5	<p>Question: In your opinion, does the use of technology-based learning media influence students' motivation and learning outcomes?</p> <p>Results:</p> <p>a. 13 teachers express the use of media Technology-based learning influences student motivation and learning outcomes because basically, students are more interested in new things</p> <p>b. 3 teachers do know the influence of learning media on students' motivation and learning outcomes because they cannot use computers well</p>
6	<p>Question: According to the teachers, are technology-based learning media (Schooly and Powtoon) a medium that can increase students' motivation and learning outcomes?</p> <p>Results:</p> <p>a. 7 teachers answered interesting because they know Schooly and Powtoon</p> <p>b. 9 teachers don't know about Schooly and Powtoon</p>
7	<p>Question: Are the teachers who agree to use technology-based learning media (Schooly and Powtoon) to be used in explaining the subject matter and as a learning evaluation process?</p> <p>Results: 7 teachers agreed to use Schooly and Powtoon media in explaining the material and as an evaluation material in the learning. while the rest hesitated in answering because they did not know about Schooly and Powtoon.</p>

Based on table 1 in questions 1 and 2, the results obtained regarding the use of technology-based learning media by teachers, namely the average teacher using powerpoint, google form and youtube. This is because they are familiar with the technology. After all, it is often used outside of learning activities, besides how easy it is to use. While 6 teachers chose to still use books as learning media, due to lack of time in preparing materials in technology-based learning media. In addition, the lack of adequate school facilities such as Wi-Fi which can only connect in certain places, and elderly teachers find it difficult to use technology-based media.

In points 3 and 4, it is found that teachers are aware of the importance of using technology-based learning media because it follows the development of today's technology. In addition, the average student is also an active internet user so that if technology-based learning media is applied, it will be easily absorbed by students. However, the use of this media cannot be carried out by all teachers,

because of the 16 teachers who participated in the interviews, only 3 teachers had received training on the use of technology. This causes teachers who can operate computers well to only use media that are considered familiar and easy to use.

Points 5, 6, and 7 give results under the importance of using technology-based learning media such as *Schooly* and *Powtoon*, because the two websites are equipped with interesting features, so they can hone the skills possessed by students which have an impact on student motivation and learning outcomes later. However, some teachers still do not know about *Schooly* and *Powtoon*, so they do not know the advantages of using *Schooly* and *Powtoon*.

In addition to the description of the results of the open questionnaire by the teacher, the results of the open questionnaire by the students were also presented regarding the use of *Schooly* and *Powtoon* learning media. These results can be seen in table 2.

Table 2. Results of an open questionnaire with students

No	Questions and Results
1	<p>Question: What learning resources do teachers usually use in class?</p> <p>Results: The average respondent answered that the teacher used learning media using books, power points, and videos</p>
2	<p>Question: Do you often use technology-based learning media?</p> <p>Results: On average, respondents answered that teachers rarely use technology-based learning media</p>
3	<p>Question: In your opinion, is it necessary to use technology-based learning media?</p> <p>Results: All students answered necessary because they often study outside school hours by utilizing technology</p>
3	<p>Question: In your opinion, which learning method is more interesting using books using technology-based media?</p> <p>Results: All students answered that the use of technology-based learning media was more interesting because it was easy to understand and not easily bored during learning</p>
4	<p>Question: Does the use of learning using technology-based media (Schoology and Powtoon) increase your motivation and understanding of the lesson?</p> <p>Results:</p> <ol style="list-style-type: none"> A total of 8 students stated that using Schoology and Powtoon media can increase motivation and understanding of the lesson because there are many animations available so that students can channel their creativity along with answering the assignments given. 22 students did not know because they never used Schoology and Powtoon

Based on table 2, it is found that the learning media used by teachers also determine their level of motivation and understanding in the lesson. Almost all students who are respondents are more interested in the material presented by the teacher if the teacher uses technology-based learning media. Students feel with the use of technology-based learning media such as school and Powtoon they can develop their creativity and at the same

time answer the tasks that have been given by the teacher.

Based on closed questions and questionnaires by teachers and students, answers were obtained related to the need for developing schoology and powtoon learning media on student motivation and learning outcomes. These results can be seen in table 3.

Table 3. Results of a closed questionnaire

No	Question	Average Result	
		Teacher	Student
1	The level of trust is one way to integrate learning using technology and information	81.4	89
2	The level of confidence in the use of schoology learning media to increase motivation and learning outcomes	74.1	76
3	The level of confidence in the use of powtoon learning media to increase motivation and learning outcomes	79	83

The average result of the closed questionnaire refers to the need for needs analysis according to the regulations of the Ministry of Education and Culture, the

value provisions if obtained $88 < N \leq 100$ are categorized as very good, for a value of $76 < N \leq 88$ is categorized as good, for a value of $65 < N \leq 76$ is categorized sufficient, and

scores <65 are categorized as less. Based on the results of the questionnaire in Table 3, the results of the teacher and student analysis showed that the level of confidence in how to integrate learning with technology, information, and communication was in a good category. This means that integrating learning with technology, information, and communication generally goes well. While the level of confidence in the use of learning media *schoolology* categorized is sufficient. This is possible because of the limited facilities available in schools, and the ability of teachers to master the use of schoolology media. Finally, for the results of the analysis of the level of trust in the use of powtoon learning media, it is categorized as good. This is because many teachers and students better understand the use of powtoon media.

The results of this study can be used as a reference in developing learning media using schoolology and powtoon media which aims to increase student motivation and learning outcomes. The development of technology-based learning media is needed in today's education, especially in attracting motivation and improving student learning outcomes. This is evidenced by the research conducted by (Fajar, Riyana, and Hanoum 2017) regarding the effect of using powtoon media on student learning outcomes in social science subjects. The research has the result that the use of powtoon learning media can improve student learning outcomes more than using powerpoint learning media. Similar research was also conducted by (Tigowati, Efendi, and Budiyanto 2017) and (Pratama and Hartini 2019) regarding schoolology and Edmodo-based e-learning in terms of motivation and learning outcomes of high school students. The result of this research is the use of the schoolology-based e-learning method is better than using Edmodo. This is because the use of schoolology is easily accessible, and students are more targeted at using the schoolology application. Furthermore, research conducted by (Ariyanto and

Kantun 2018) regarding the use of powtoon media to increase student interest and learning outcomes was conducted at SMP Nurul Islam Jember. The results showed that the increase in students' interest in learning was 60% and student learning outcomes were 85.71%.

Based on the results of the research that has been described, along with evidence from other researchers, it can be seen that the need for the use of technology-based learning media, especially schoolology and powtoon, is very necessary. This is based on students who are more interested in the learning process if the teacher uses learning media that is varied, and not monotonous.

CONCLUSION

The use of appropriate technology-based learning media can increase students' motivation and learning outcomes. So far, digital simulation learning in schools is done conventionally, as a result, students are less motivated and their learning outcomes are low. When applied learning using media based on schoolology and powtoon students tend to be more motivated and learning outcomes have increased as seen from the results of the questionnaire. From the results of the open questionnaire and the closed questionnaire, it can be seen that the need for learning media can affect the motivation and learning outcomes of students. The results of this study can be used by teachers in an effort to increase motivation and student learning outcomes. By paying attention to the learning needs and characteristics of students so that motivation and cognitive learning outcomes can be increased.

REFERENCES

- Adiko, Hendra Saputra S. 2018. "Penggunaan Media Pembelajaran Berbasis Ict (Information Communications Technologies) Dalam Meningkatkan Motivasi Belajar Peserta Didik." *Akademika : Jurnal Ilmiah Media Publikasi Ilmu*

- Pengetahuan dan Teknologi* 7(2): 67–76.
- Adiputra, Sofwan, and Mujiyati. 2017. “Motivasi Dan Prestasi Belajar Siswa Di Indonesia: Kajian Meta-Analisis.” *Konselor* 6(4): 150.
- Alfansyur, Andarusni. 2019. “Pemanfaatan Media Berbasis Ict ‘Kahoot’ Dalam Pembelajaran Ppkn Untuk Meningkatkan Motivasi Belajar Siswa.” *Bhineka Tunggal Ika: Kajian Teori dan Praktik Pkn* 9.
- Aminoto, Tugiyono, and Hairul Pathoni. 2014. “Penerapan Media E-Learning Berbasis Schoology Untuk Meningkatkan Aktivitas Dan Hasil Belajar Materi Usaha Dan Energi Di Kelas XI SMA N 10 Kota Jambi.” *Jurnal Sainmatika* 8(1): 13–29.
- Ariyanto, Rio, Sri Kantun, and Sukidin. 2018. “Penggunaan Media Powtoon Untuk Meningkatkan Minat Dan Hasil Belajar Siswa Pada Kompetensi Dasar Mendeskripsikan Pelaku-Pelaku Ekonomi Dalam Sistem Perekonomian Indonesia.” *Jurnal Ekonomi Pendidikan* 12: 122–27.
- Budiana, H.R, N.A. Sjafirah, and I. Bakti. 2015. “Pemanfaatan Teknologi Informasi Dan Komunikasi Dalam Pembelajaran Bagi Para Guru Smpn 2 Kawali Desa Citeureup Kabupaten Ciamis.” *Dharmakarya* 4(1).
<http://jurnal.unpad.ac.id/dharmakarya/article/view/9042> (November 11, 2021).
- Fajar, Syahrul, Cepi Riyana, and Nadia Hanoum. 2017. “Pengaruh Penggunaan Media Powtoon Terhadap Hasil Belajar Siswa Pada Mata Pelajaran Ilmu Pengetahuan Sosial Terpadu.” *Jurnal Edutcehnologia* 3(2): 104–14.
- Hidayah, Miftakhul, and Sri Nuryanto. 2010. “Pengaruh Penggunaan Media Pembelajaran Berbasis Ict (Information, Communication, And Technology) Terhadap Motivasi Belajar Siswa Kelas X Pada Pembelajaran Ekonomi Di Sman 1 Banguntapan.” *Pelita - Jurnal Penelitian Mahasiswa UNY* 5(2): 11.
- Irsan, Irsan. 2019. “Peranan Media Pembelajaran Berbasis Ict Dalam Meningkatkan Motivasi Belajar Siswa Sekolah Dasar Kota Baubau.” *Jurnal Basicedu* 3(2): 746–53.
- One, One. 2017. “Efektivitas Penggunaan Media Pembelajaran Audiovisual Powtoon Dalam Meningkatkan Motivasi Belajar Siswa Di Madrasah Aliyah.” *Jurnal Pendidikan Pembelajaran Khatulistiwa* 6(3): 1–9.
- Pratama, Wahyu Aji, and Sri Hartini. 2019. “Analisis Literasi Digital Siswa Melalui Penerapan E-Learning Berbasis Schoology.” 6(1): 5.
- Putri Ningrat, Sayu, I Made Tegeh, and Made Sumantri. 2018. “Kontribusi Gaya Belajar Dan Motivasi Belajar Terhadap Hasil Belajar Bahasa Indonesia.” *Jurnal Ilmiah Sekolah Dasar* 2(3): 257.
- Ricardo, Ricardo, and Rini Intansari Meilani. 2017. “Impak Minat dan Motivasi Belajar Terhadap Hasil Belajar Siswa.” *Jurnal Pendidikan Manajemen Perkantoran* 2(2): 79.
- Tigowati, Tigowati, Agus Efendi, and Cucuk W Budiyanto. 2017. “E-Learning Berbasis Schoology Dan Edmodo: Ditinjau Dari Motivasi Dan Hasil Belajar Siswa SMK.” *Elinvo (Electronics, Informatics, and Vocational Education)* 2(1): 49–58.
- Undang-Undang Republik Indonesia No. 20 Tahun 2003 Tentang Sistem Pendidikan Nasional*. 2016. Jakarta: Sinar Grafika.
- Uno, Hamzah. 2007. *Teori Motivasi Dan Pengukurannya*. 3rd ed. Jakarta: Bumi Aksara.

Widoyoko, Eko Putro. 2014. *Teknik
Penyusunan Instrumen Penelitian*.
Yogyakarta: Pustaka Belajar.