PAPER • OPEN ACCESS

The Effect of Quipper School Assisted Blended Learning (QSBL) on Student Motivation and Interest in Learning

To cite this article: Muhammad Mushfi El Iq Bali et al 2021 J. Phys.: Conf. Ser. 1899 012154

View the article online for updates and enhancements.

You may also like

- <u>Satellite Alignment. III. Satellite Galaxies'</u> <u>Spatial Distribution and Their Dependence</u> <u>on Redshift with a Novel Galaxy Finder</u> Lin Tang, , Weipeng Lin et al.
- A novel robust filter for outliers and timevarying delay on an SINS/USBL integrated navigation model
 Bo Xu, Jiao Zhang and Asghar A Razzaqi
- <u>Temperature Dependent</u> <u>Photoluminescence of Self-Organized</u> <u>InAs Quantum Dots on an InGaAs Strain</u> <u>Buffer Layer Grown by MOCVD</u> Kun-Fu Huang, Feng-Ming Lee, Chih-Wei Hu et al.

ECS Toyota Young Investigator Fellowship

ECS TOYOTA

For young professionals and scholars pursuing research in batteries, fuel cells and hydrogen, and future sustainable technologies.

At least one \$50,000 fellowship is available annually. More than \$1.4 million awarded since 2015!



Application deadline: January 31, 2023

Learn more. Apply today!

This content was downloaded from IP address 103.35.152.146 on 08/01/2023 at 07:01

Journal of Physics: Conference Series

The Effect of Quipper School Assisted Blended Learning (QSBL) on Student Motivation and Interest in Learning

Muhammad Mushfi El Iq Bali^{1*}, Zamroni², Umar³, Bisri Musthofa⁴, Ika Ratih Sulistiani⁵, Mutiara Sari Dewi⁵, Hasan Baharun¹, Dahlan Abdullah⁶

¹ Islamic Faculty, Nurul Jadid University, Paiton, Probolinggo, Indonesia

³ Tarbiva Faculty, Islamic Institute of Muhammadiyah Sinjai, Indonesia

⁴ Postgraduate Program, State University of Malang, Indonesia

⁵ Islamic Faculty, University of Islam Malang, Indonesia

⁶Department of Information Technology, Universitas Malikussaleh, Indonesia

*mushfieliqbali8@gmail.com

Abstract. This study aims to: 1) find out the differences in motivation and interest in learning before and after QSBL; 2) knowing the difference in learning motivation who applied and did not apply QSBL; and 3) knowing the differences in learning interest who applied and did not apply OSBL. This research subject of Class IX students at SMP Darul Lughah Walkaromah Kraksaan Probolinggo. This study uses a quasi experimental design quantitative research design with a pretest-posttest controlled group design model. Learning in the control class uses conventional models while the experimental class applies QSBL model. The results of the study showed that: 1) there were differences in motivation and learning interest before and after applying QSBL with an increase in the significance value of 4.93 to 5.04 in the control class, while the experimental class a total of 12.32 to 15.38; 2) there are differences in learning motivation who apply and do not apply QSBL with a significance value of 0.039 (p<0.05); and 3) there are differences in the learning interest who apply and do not apply QSBL with a significance value of 0.035 (p<0.05).

1. Introduction

Educational experts state that the main function of the school is to foster and develop all potential individuals, especially the development of each student's physical, intellectual and moral potential [1]. The potential of students can be developed through the learning process by utilizing media or facilities that are in accordance with the characteristics of students. Correlation of media-based learning processes with student characteristics makes it easier for educators to achieve learning goals. Learners easily understand and apply material concepts and skills based on the learning experience they experience.

The role of information and communication technology begins to penetrate the realm of education and learning that demands changes in community life, especially in aspects of knowledge, art and culture [2]. The progress of information and communication technology erodes all forms of difficulties that have hindered students to learn. High accessibility in obtaining information, knowledge, and unlimited insight into new learning methods that are of interest to students.



Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI. Published under licence by IOP Publishing Ltd

² Tarbiya Faculty, IAIN Samarinda, Borneo, Indonesia

WEAST 2020		IOP Publishing
Journal of Physics: Conference Series	1899 (2021) 012154	doi:10.1088/1742-6596/1899/1/012154

The rapid development of science and technology needs to be balanced with the quality of quality human resources and demands the application of material concepts obtained in life in society [3]. Quality education requires professional educators and is responsive to environmental and social conditions. The role of education in people's lives is a measure of the progress of civilization. Education is very important to improve the quality and quality of human resources [4].

2. Blended Learning

Blended learning is a learning strategy that integrates face-to-face learning with web-based learning. Blended learning is a flexible approach to designing programs that support a mixture of different times and places to learn [5]. Blended Learning comes from the word blended (combination/mixture) and learning (learning). Another term that is often used is the hybrid course (hybrid: mix/combination, course: course). The original meaning as well as the most common blended learning refers to learning that combines or mixes between face to face learning and computer based learning. The definition of blended learning based learning is learning that combines the strategies of delivering learning using face-to-face activities (offline) and computer-based learning (online), through the internet and mobile learning [6]. Blended learning represents clear advantages for creating learning experiences that provide the right learning at the right time and time for each individual.

The blended learning model is a flexible learning model, because it uses synchronous and asynchronous learning settings. Through the use of the blended learning model instructional attractiveness can be improved through organizing material, place, time, and appropriate activities [7]. Blended learning is a pedagogic approach that combines effectiveness with opportunities for class socialization that technologically encourage active learning. The implementation of this approach allows online learning resources to be used, especially web-based ones, without leaving face-to-face activities. With the implementation of blended learning, learning takes place more meaningfully because of the diversity of learning resources that might be obtained [8].

3. Quipper School

Learning media is one component in a learning environment that can stimulate students to learn. Learning media can be used as a stimulus to increase the willingness of students to follow the teaching and learning process well [9]. Quipper School is one of the latest open source Learning Management System portals launched in February 2014 and has pages in Indonesian. Quipper School is accessible to educators and students who have registered themselves on the site http://www.quipperschool.com/ and users are free. One type of e-learning is quipper school, quipper school is an application that contains various material and subject matter given by the government in all schools, the service is also free so that it will make it easier for educators especially in uploading material, assignments, homework, training questions, monitor the activities of students, or examinations in class with the specified time [10].

4. Motivation and Interest in Learning

Heinrichs [11] expressing motivation can be categorized into two, namely intrinsic and extrinsic. Intrinsic motivation is motives that originate from within a person, so there is no need for external stimulation to activate it. While extrinsic motivation, namely motivation that comes from outside the person. Extrinsic motivation is motives that are active and functioning because there is an encouragement from outside. Extrinsic motivation can also be said as a form of motivation that learning activities begin and continue based on external encouragement that is not continuously related to learning activities [12].

Motivation is an internal process that activates, guides, and maintains behavior over time. There are many different types, intensities, goals, and directions of motivation. Motivation for learning is very important for students and educators [13]. The learning characteristics of students have implications for the high and low motivation of learners. Motivation is one of the factors that influence the success of learning students. More than that, motivation not only affects the learning outcomes, but also the learning process [14]. Expert teachers capitalize on situational interest to increase students' motivation to learn [15].

Journal of Physics: Conference Series

The framework of learning in a community of thinking accords a central place to the effort to arouse primary interest (in the weak sense) in the students' minds [16]. Interest is a feeling of preferring or feeling interested in something or activity, without anyone telling. Interest can be expressed through statements and can also be manifested through participation in an activity. These manifestations can be in the form of high learning enthusiasm, seriousness in taking lessons [17], seriousness in doing learning assignments, active in class during learning, and enthusiasm to ask about the material being taught. One important aspect is the consideration of the relevant age and gender-specific interests of the students as a motivational link for dealing with morally related questions [18]. Student's thinking skills become very important as part of the outcome of the learning process [19]. One indicator of learning success is fostering students' interest in learning.

5. Research Method

This study includes a type of quantitative research with a quasi-experimental approach. The study design used a pretest-posttest controlled group design model. Learning in the experimental class applies QSBL model, while the control class is a conventional learning process. The experimental design in the control class and experimental class before getting treatment the application of QSBL model, both of them obtained pretest using instruments in the form of questions. Furthermore, applying QSBL model in learning. Then given the posttest using the pretest problem, the results were analyzed. The instrument used was in the form of an observation sheet to measure students' learning motivation and questionnaire to measure students' learning interest. The analysis technique used is in the form of descriptive analysis techniques and ANOVA techniques. Hypothesis testing using ANOVA SPSS test version 16.

6. Result and Discussion

Learning motivation of students is measured using observation when the learning process and monitoring the activities of students in sending assignments and discussions through the QSBL.

Statistic -	Cont	Control		Experiment	
	Pra	Pasca	Pra	Pasca	
Minimum	107,00	109,00	105,00	106,00	
Maximum	144,00	148,00	143,00	156,00	
SD	10,79	12,65	12,75	14,71	
Mean	122,45	127,38	123,88	139,26	

Table 1. Results of Descriptive Analysis of Learning Motivation for Students

The results of the descriptive analysis of students' learning motivation before treatment showed an average value in the control class (122,45) and experimental class (123,88) with a difference of 1,43. The difference in the mean value of students' learning motivation after treatment experienced a significant increase, which amounted to 4,93 in the control class, while the experimental class amounted to 15,38. Thus, the learning motivation of students in the control class and experimental class is classified as a good category, but with the application of QSBL model the average student motivation in the experimental class is higher than the average in the control class with conventional learning.

1899 (2021) 012154 doi:10.1088/1742-6596/1899/1/012154

Table 2. Results of ANOVA Learning Motivation for Students				
Treatment	Class	Mean	F	р
Pra -	Control	122,45	0.107	0.762
	Experiment	123,88	0,197	0,702
Pasca -	Control	127,38	7 7 2 9	0.020
	Experiment	139,26	1,238	0,039

Table 2. Results of	ANOVA Learning	Motivation	for Students
		_ 1110111411011	

The ANOVA test results showed the significance value of students' learning motivation before treatment 0,762 (p>0,05) so that there was no difference between the control class and the experimental class. The significance value of student motivation after treatment was 0,039 (p<0,05) so that there was a difference between the control class and the experimental class. It can be concluded that Ho is rejected and Ha is accepted, so there is the influence of QSBL model on students' motivation.

D 1 1 A D	1. 0	D		CT I	T •	T ·
	oculto of	Lacomintizio		at Loompord'	Intoroct in	0.00001000
	estins or	Describitve	ADDIVSIS	n reamers	innerest m	геанно
1 4010 5.10		Deberiptive	I IIIGI Y DID V		miter est m	Louining
			-1			

Statistic	Control		Experiment	
Statistic	Pra	Pasca	Pra	Pasca
Minimum	108,00	110,00	106,00	107,00
Maksimum	143,00	147,00	142,00	155,00
SD	11,57	11,85	11,95	13,67
Mean	121,68	126,72	122,83	135,15

The results of the descriptive analysis of students' interest in learning before treatment showed mean values in the control class (121,68) and experimental class (122,83) with a difference of 1,15. The difference in the mean value of students' learning motivation after treatment experienced a significant increase, which was equal to 5,04 in the control class, while the experimental class amounted to 12,32. Thus, students' interest in learning in the control class and experimental class is classified as good, but with the application of QSBL model the average learning interest of students in the experimental class is higher than the average in the control class with conventional learning.

Table 4. ANOVA Results for Students interest in Learning				
Treatment	Class	Mean	F	р
Pra -	Control	121,68	0.102	0.712
	Experiment	122,83	0,192	0,715
Pasca -	Control	126,72	7.066	0.025
	Experiment	135,15	- 7,000	0,055

Table 4 ANOVA Results for Students' Interest in Learning

The ANOVA test results show the significance value of students' learning interest before treatment 0,713 (p>0,05) so that there is no difference between the control class and the experimental class. The significance value of students' interest in learning after treatment was 0,035 (p<0,05) so that there was a difference between the control class and the experimental class. It can be concluded that Ho is rejected and Ha is accepted, so there is the influence of QSBL model on students' interest in learning.

7. Conclusion

Based on the results of the study it can be concluded that: 1) there were differences in motivation and interest in learning of Class IX students at the SMP Darul Lughah Walkaromah Kraksaan Probolinggo before and after applying QSBL with an increase in the significance value of 4,93 to 5,04 in the control class, while the experimental class was 12,32 to 15,38. The students' motivation and interest in learning is better by applying QSBL model; 2) there is a difference in learning motivation of Class IX students at SMP Darul Lughah Walkaromah Kraksaan Probolinggo who apply and do not apply QSBL with a significance value of 0,039 (p<0,05). The learning motivation of students with QSBL model learning is better than learning motivation students with conventional learning; and 3) there are differences in the learning interest of Class IX students in SMP Darul Lughah Walkaromah Kraksaan Probolinggo who apply and who do not apply QSBL with a significance value of 0,035 (p<0,05). The students' learning interest with QSBL model learning is better than motivation learn students with conventional learning.

Journal of Physics: Conference Series

References

- [1] U. Rahmah, "Pengaruh Penerapan Green School terhadap Minat Belajar Siswa di SMPN 26 Surabaya," *At-Turas*, vol. IV, no. 2, pp. 153–171, 2017.
- [2] C. Muali, "Konstruksi Strategi Pembelajaran Berbasis Multiple Intelligences Sebagai Upaya Pemecahan Masalah Belajar," *Pedagogik*, pp. 1–11, 2016.
- [3] A. Rifqi, "Implementasi Total Quality Management pada Pendidikan Jarak Jauh," *Al-tanzim*, vol. 2, no. 2, pp. 167–176, 2018.
- [4] M. Mushfi and E. Iq, "MODEL INTERAKSI SOSIAL DALAM MENGELABORASI KETERAMPILAN SOSIAL," *J. Pedagog.*, vol. 4, no. 2, pp. 211–227, 2017.
- [5] S. Islam, H. Baharun, C. Muali, M. I. Ghufron, and M. M. E. I. Bali, "To Boost Students' Motivation and Achievement through Blended Learning," *J. Phys. Conf. Ser.*, vol. 1114, pp. 1– 11, 2018.
- [6] S. S. Bawaneh, "The Effects of Blended Learning Approach on Students' Performance: Evidence from a Computerized Accounting Course," *Int. J. Humanit. Soc. Sci.*, vol. 1, no. 6, pp. 63–69, 2011.
- [7] C. Ismaniati, Sungkono, and D. Wahyuningsih, "Model Blended Learning untuk Meningkatkan Kemandirian Belajar dan Daya Tarik dalam Perkuliahan," J. Penelit. Ilmu Pendidik., vol. 8, pp. 19–27, 2015.
- [8] L. M. Jeffrey, J. Milne, G. Suddaby, and A. Higgins, "Blended Learning : How Teachers Balance the Blend of Online and Classroom Components," J. Inf. Technol. Educ., vol. 13, pp. 121–140, 2014.
- [9] M. Imron and L. Hakim A.I, "Keefektifan Strategi Asosiasi Kotak Kata dalam Meningkatkan Motivasi Belajar dan Kemampuan Peserta Didik dalam Menghafal Asmaul Husna," J. Pedagog., vol. 5, no. 1, pp. 143–154, 2018.
- [10] S. D. Ratri, Bain, and S. Amin, "Pengaruh Penggunaan Media Pembelajaran Sejarah Indonesia E- Learning Berbasis Quipper School Terhadap Minat dan Hasil Belajar Siswa Kelas X SMK N 04 Kendal Tahun Pelajaran 2016/2017," *Indones. J. Hist. Educ.*, vol. 5, no. 2, pp. 60–67, 2017.
- [11] Hambali, "Cooperative Learning sebagai Upaya Membangkitkan Kembali Extinction Motivasi Belajar," *Edurelegia*, vol. 1, no. 1, pp. 13–24, 2017.
- [12] M. Alwan, "Pengembangan Model Blended Learning Menggunakan Aplikasi Edmodo untuk Mata Pelajaran Geografi SMA," *J. Inov. Teknol. Pendidik.*, vol. 4, no. 1, pp. 65–76, 2017.
- [13] S. B. Sjukur, "Pengaruh Blended Learning Terhadap Motivasi Belajar dan Hasil Belajar Siswa Tingkat SMK," J. Pendidik. Vokasi, vol. 2, no. November 2012, pp. 368–378, 2012.
- [14] H. Baharun, "Penerapan Pembelajaran Active Learning untuk Meningkatkan Hasil Belajar Siswa di Madrasah," *J. Pendidik. Pedagog.*, vol. 1, no. 1, pp. 34–46, 2015.
- [15] D. Kauchak and P. Eggen, *Educational Psychology: Windows on Classrooms*. New Jersey: Merrill, 2010.
- [16] Y. Harpaz, *Teaching and Learning in a Community of Thinking*. New York: Springer, 2014.
- [17] S. A. Hasan Baharun, "Curriculum Development Through Creative Lesson Plan," *Cendikia*, vol. 16, no. 1, pp. 41–62, 2018.
- [18] K. Heinrichs, F. Oser, and T. Lovat, *Moral Development And Citizenship Education*. Rotterdam: Sense Publishers, 2013.
- [19] C. Muali, S. Islam, and M. M. E. I. Bali, "Free Online Learning Based On Rich Internet Applications; The Experimentation Of Critical Thinking About Student Learning Style," J. Phys. Conf. Ser., vol. 1114, pp. 1–6, 2018.