



Application of Learning Media and Technology in Schools to Increase Student Interest in Learning

Prakash Puhka ¹, Barreiro Annemari ², Rannikko Harry ³

¹ *Delhi Technological University, India*

² *Arrupe Jesuit University, Zimbabwe*

³ *Vietnam National University, Vietnam*

Corresponding Author: Prakash Puhka, E-mail; prakashpuhka@yahoo.co.id

Article Information:

Received December 10, 2022

Revised December 19, 2022

Accepted December 26, 2022

ABSTRACT

Long before the development of technology, in the world of education the learning media used has not developed rapidly. Educators are required to increase student interest in learning by using modern technology media. Learning media is a technology that carries messages that can be used for learning purposes and is a communication to convey subject matter. Learning technology is utilization, management to facilitate the learning process. The purpose of this study is to determine the application of learning media and technology that can increase student interest in learning, especially in schools. This research uses Quantitative research by conducting online surveys and in-depth interviews with school teachers. The results of this study explain that there are several applications that are used as media for learning, one of which is YouTube. The conclusion of this study explains that there are many technologies or applications that can be utilized to increase student interest in learning. The limitation of this research is that researchers only collect information related to applications that can be utilized to increase student interest in learning, researchers hope that future researchers can develop learning media applications as a tool to help teachers and students in the learning and teaching process

Keywords: *Application, Learning Media, Student Interest*

Journal Homepage

<https://ejournal.staialhikmahpariangan.ac.id/Journal/index.php/wp/>

This is an open access article under the CC BY SA license

<https://creativecommons.org/licenses/by-sa/4.0/>

How to cite:

Puhka, P., Annemari, B., & Harry, R. (2022). Application of Learning Media and Technology in Schools to Increase Student Interest in Learning. *World Psychology*, 1(3), 229-245. <https://doi.org/10.55849/wp.v1i3.387>

Published by:

Sekolah Tinggi Agama Islam Al-Hikmah Pariangan Batusangkar

INTRODUCTION

An application is a set of software tools that work independently of the technical functionality of the system (Wang et al., 2019). From time to time applications continue to develop, even small children or what is an application. Applications have many benefits in the needs of human activities, so applications become a source of supporting tools for

human work (Saleh et al., 2021; Turesson et al., 2022). Applications can also be said as sub-wires in computer devices, so that this computer can directly perform a task performed by its users (Kulkarni, 2021; Nørve Eidsvik & Schjølberg, 2018; Zhang et al., 2022). Applications that are referred to as software, for example, Microsoft Word, Excel, Firefox From some of these applications can be able to interact properly. The purpose of this application is designed as a tool to help users do a job both directly and indirectly.

Media and learning applications are a form of physical equipment that is designed to convey and integrate with learning (Kim & Yoon, 2021). This media and technology application is very influential for students and educators because it is useful for increasing student interest in learning, one of which is in school. In this media and technology application, researchers take an example to increase student interest in learning is the YouTube application. Students can use the YouTube application as a learning media with many features to support student interest in learning. However, the use of this YouTube application must be under the responsibility of educators so that students do not abuse this application, and educators must also provide direction to their students so that they can use it properly.

Learning media is a means to make it easier for educators to convey learning material and increase student interest in learning continues (Carpenter & Harvey, 2020; Dang et al., 2021; Harvey & Carpenter, 2020). Learning media can also be a solution so that students are not bored, learning media can help the development of students' minds regularly about the things they experience in their teaching and learning activities. However, not all learning media can be used as a way to increase student interest in learning. Therefore, educators are required to be more creative in developing learning media (Hanney & Skirkeviciutey, 2020; Moon, 2018; Ross et al., 2021). The utilization of learning media in the teaching and learning process needs to be planned and designed systematically so that learning media is effective for use in the teaching and learning process.

This media and technology has great benefits for education (Botelho et al., 2018; Burgess et al., 2018; Pase et al., 2018). So that many applications support applications to increase student interest in learning, such as YouTube can also prepare slides to be able to view and record existing material. Learners can develop broad knowledge or insight and can even think rationally in the future (Ezzani & King, 2018; Guilding et al., 2020; O'Donovan, 2018). Education can now be interpreted as the formation of a person's personality, critical thinking and broad insight, so that what they get is useful for the future ("Human Tuning Fork Culture," 2019). Learning can develop the learner's psychological activists to understand the message according to their analytical power. The development of this analytical power is a function of the form of the learning process. Learning Media helps to be creative to shape educational programs in order to create good learning.

Technology and learning media continue to increase, in this 21st century era, technological developments are very quickly applied by humans with various features and systems (Reis et al., 2021). Technology is a means of infrastructure, science that

creates tools to processing methods to help solve various human needs and work (Huang et al., 2020). Technology was started by humans as a resource into simple tools. The development of this technology requires all parties to be skilled in using it (Hazelton et al., 2019). With the existence of technology in the aspect of education can help the learning process continue to improve, for that the use of technology in the world of education is a must and for self-development for teachers or students.

In the era of media and technology development, there is no doubt, as can be seen and felt that children can already use technology such as using cellphones without any teaching from parents. Before determining the media and learning aids, a teacher should know the characteristics and learning types of his students both individually and as a whole, so that the media and tools to be used are in accordance with the conditions of the students, so that the messages conveyed in learning are easily accepted and can last a long time. Educators are now competing in making interesting learning media applications, it can be ascertained that educators have confirmed to students so that they cannot be confused in using learning media applications.

The sustainability of these applications and learning media must also consider the conditions and how the student is. Whether the area allows using this learning media application, there are many obstacles if educators force their students to use learning media applications, it can be categorized that remote areas do not allow students to use learning media, because it will make their students have to have efforts to find networks and other needs. In contrast to urban areas, the internet network is adequate to access various media applications to increase student learning. Media is an interesting study and is of great interest to scientists even though it has a different meaning. So that this learning media can be used by anyone.

Based on the results of relevant research related to this study conducted by Cecep Kustandi and Daddy Darmawan, basically the learning media itself is so that students can learn according to their abilities and interests in learning (Figueras-Maz et al., 2021; Jordaan, 2018). This aims to create or achieve learning development which includes cognitive, affective and psychomotor aspects (Fernandez-Carames & Fraga-Lamas, 2018; Jenkins et al., 2019; Kumar et al., 2018), so that learners and educators work together in building these aspects in order to achieve the goals of learning. And students cannot master the material conveyed by the educator quickly, students also have to repeat the material conveyed by the teacher repeatedly so that they understand the learning.

Meanwhile, according to Mochamad Rangga Mahendra, the application that is considered as one of the media that has extraordinary potential to increase students' interest in learning is Youtube. Youtube provides opportunities for students and educators to express and collaborate in the world of education (Mikelli & Dawkins, 2020), as well as gaining broad insights and enhancing experiences. This YouTube app is a visually-generated site (Figueras-Maz et al., 2021) In this video, someone can upload videos for free and can watch other videos. There can also criticize and suggest the material or insight provided. This YouTube provides a lot of knowledge related to learning materials ranging from elementary school, junior high school, high school to college level which

always innovates in the world of education so that they do not find it difficult to find learning materials and can increase interest in learning.

In this modern era, YouTube is very influential on the world of education, educators are also required to be able to use YouTube well, some educators make learning videos and then upload them on YouTube so that students can see and listen to them. This method is done so that students are not bored in learning and this method is a form of increasing student interest in learning at school. Students can already use this YouTube but students are not allowed to see other things. Usually learning uses the lecture method, so that students become bored and bored (de A. F. F. Finger et al., 2020; Schmidt et al., 2019; Thwin & Lwin, 2018). Educators here play a role in increasing student interest in learning, one of which is using this YouTube application because there are various features that can increase interest in learning so that students can be motivated in learning.

Based on the description above, the researcher is interested in examining more deeply, the extent to which educators can use this learning media application, as a student's interest in learning at school. The purpose of this study is to observe how educators use learning media applications as well as whether students are able to accept and use learning media applications from educators. Researchers hope that students can be motivated by this learning media application in order to create a generation that is broad-minded and has good skills. It is hoped that in the future the use of applications and learning media will be further developed and create various creative feature features to attract students, so that students have a passion for learning and have a lot of inspiration.

RESEARCH METHODOLOGY

The research model carried out is to use quantitative methods, the type of quantitative used is Survey (Gan et al., 2019; Rotenstein et al., 2018; Scheim & Bauer, 2019). The purpose of this research is to find out and analyze observation data that can increase student interest in learning (Lee et al., 2022). This research was conducted in one of the schools in ASEAN countries, during the odd semester learning of the 2022/2023 school year. The research time was chosen because the learning conditions were offline and there were curriculum changes, such as the Merdeka Curriculum. Maybe with the new changes these applications can be used as learning media during the learning process, therefore one of the learning media and technology applications will emerge.

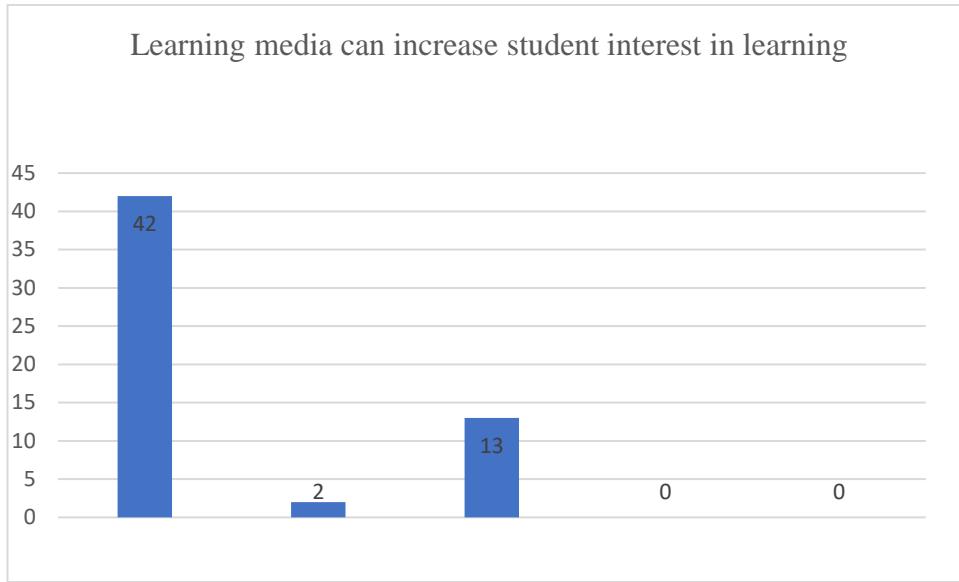
The source of this research comes from educators and students at the School who participated in filling out an online-based questionnaire (Ferlay et al., 2019; Gautret et al., 2020; Li et al., 2020). Therefore, it can be seen from the answers of educators and students in the use of learning media and technology applications, how far educators and students understand about this learning media application (Tang et al., 2020; Théry et al., 2018). This learning media and technology application can be applied permanently at school, because it can help educators and students in the continuity of the learning process even though there are still obstacles (Buda, 2020; Steyn & Heystek, 2018). Therefore, educators must prepare all their contributions with the school so that it is easier to use and apply the learning media, this aims to maximize learning.

The results of this study were collected in the form of questionnaires and surveys, before the researcher gave the questionnaire, the researcher asked several questions, then the educator filled out the questionnaire. Criticism and suggestions from several validators of researchers make as a basis, reference to improve the description of the questionnaire that researchers share, in order to get respondents from the research site. The questions that researchers share are related to the application of learning media and technology in increasing student interest in learning at school, whether it needs to be improved in the teaching and learning process. The research data that has been collected, then analyzed using quantitative, namely seeing the results of the percentage and question questions in the questionnaire that has been distributed, then the percentage that has been obtained will be described through discussion with expert opinion and corrected by relevant previous researchers. In this study will make the results in the conclusion of the existing discussion. The most important goal of this research is to increase students' interest in learning using media applications and learning technology so that students are more motivated in developing this media application.

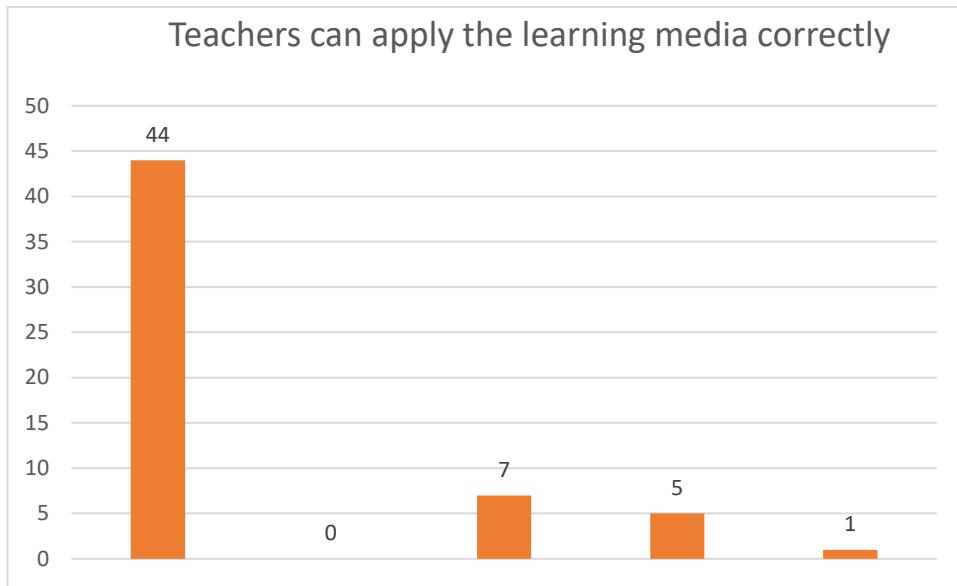
RESULT AND DISCUSSION

This learning media and technology application has an impact on education, so educators are required to use technology in the learning process. The use of technology for education can use media applications, The benefits of technology in learning can help a very broad education, therefore every educator can develop learning media applications. The development of learning media and technology is designed in accordance with educational goals in order to create students who have a passion for learning. With this learning media application, it makes it easier for students to develop their knowledge and ideas from learning.

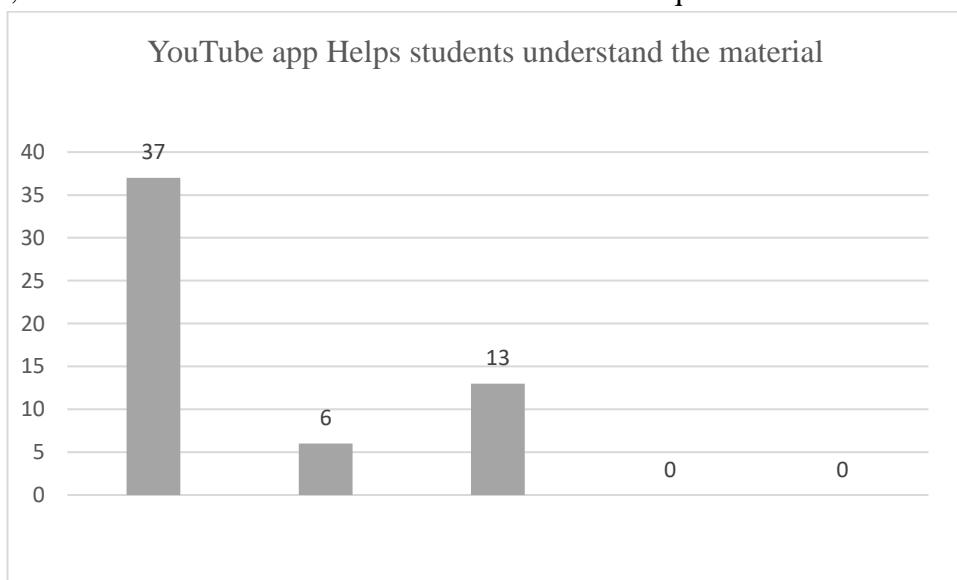
Judging by the development of learning media applications that can be accessed in this day and age, researchers can judge that learning media and technology applications are a means of supporting learning and also have great benefits and also have uses for students in the world of education today. It can be seen that on average at various levels of education today are very utilizing learning media applications as a tool to support student interest in learning, especially in schools in Asean countries. To find out the extent to which the benefits of this learning media and technology application can be reviewed by a survey giving a questionnaire assessment of the research title. And the following questionnaire research data has been attached below as follows:



It can be seen from the diagram above how students' opinions on learning media are suitable to be applied as increasing students' interest in learning. Where educators choose with different answers, there are those who answer agree, disagree, strongly agree, mediocre, disagree. This research was conducted in one of the schools in Asean countries, we can see that educators are more inclined to agree related to learning media that is suitable for increasing student interest in learning. The questionnaire obtained from this statement is 45 students answered agree, 13 students answered strongly agree, 2 students answered disagree. From the results obtained that many chose to agree and strongly agree because it can be seen from the benefits of this learning media as motivating students in the learning process, presenting various information information related to learning, helping teachers in delivering learning materials with various creations and interesting and easy to understand. With this learning media, it can facilitate all activities of both an educator and students in the learning process. And for results that disagree less likely to answer less agree because there is something that is not understood when using learning media.

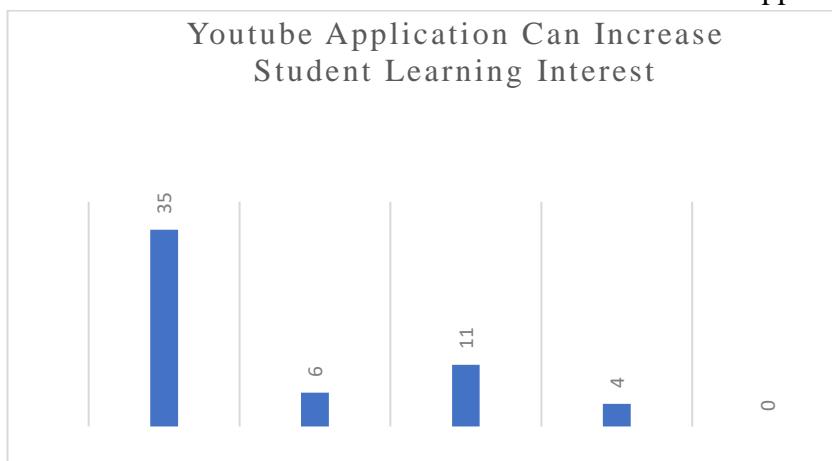


It can be seen from the diagram that it is known that many choose to agree with the question given, namely that the teacher can apply the learning media correctly. From this it can be obtained that teachers are required to be able to apply learning media properly and correctly, although some answered with 4 options, 44 answered agree, 7 answered agree, 5 were normal, 1 disagreed. If analyzed from the results of obtaining data from respondents, it can be seen that many answered agree, this is because to increase the professional creativity of a teacher in the learning process. So that teachers are required to use this learning media application even though the role of a teacher cannot be replaced by anything. Learning media cannot be useful properly if it is not used properly by teachers who are experts and skilled in using learning media. As for teachers who answered disagree and mediocre because teachers do not understand how to apply this media, how to use this media and the occurrence of inadequate network constraints.



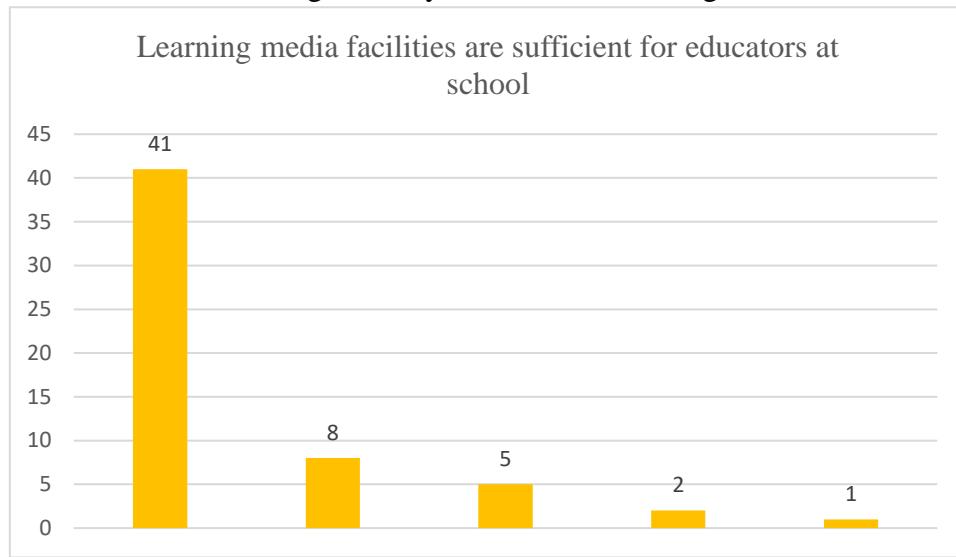
Judging from the results of the diagram above that school students give a good response from the Youtube application as helping students understand the material. A

total of 37 students answered agree, 13 students answered strongly agree, 6 students answered disagree. Based on the data obtained, it can be seen that many students agree that the Youtube application helps students in understanding the material due to the fact that Youtube provides various kinds of benefits that have a positive impact, such as being a source of student learning, making children think creatively and have innovations and eliminate boredom. When viewed from other answers, there are those who give less agreeing answers because YouTube also has a bad impact if students cannot understand the use of YouTube, such as students will be addicted to using this YouTube application and students do not have broad insights because these students prefer YouTube rather than searching for existing knowledge. So that the material learned cannot be understood this is because students are more monotonous on this YouTube application.

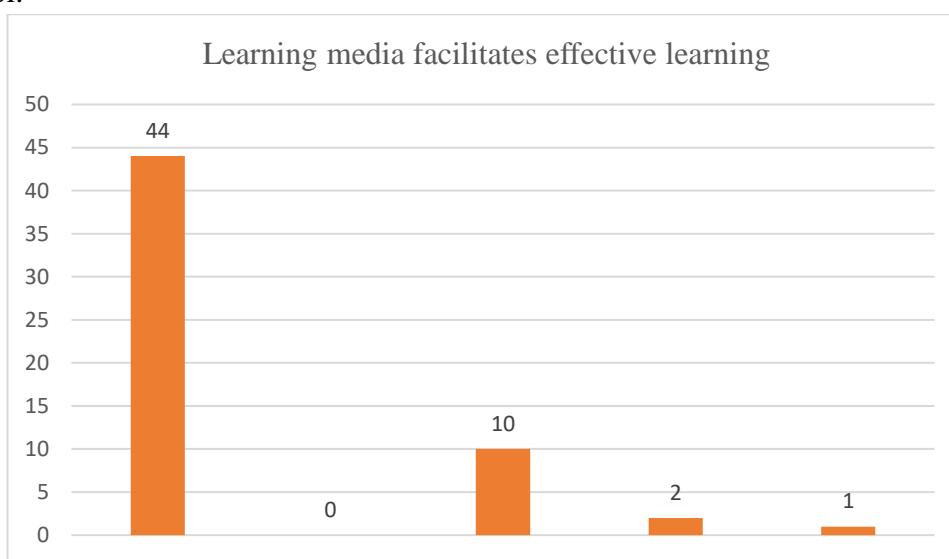


Judging from the results of the diagram above that related respondents who answered agree, disagree, disagree, and mediocre regarding the use of YouTube can increase student interest in learning. Here almost all respondents answered agree to the statement. Nearly 70% of respondents chose to agree, namely 35 students, who chose to strongly agree as many as 11 students, 6 students disagreed, and 4 other students chose normal. Students who answer disagree and mediocre from the use of YouTube can increase students' interest in learning this is because students cannot interact directly, so that these students cannot understand the learning material. Students who answer agree from the use of YouTube to increase student interest in learning because they tend to do it in two ways, namely seeing and listening, they can see the video media displayed from YouTube, they can also listen. This is beneficial for them so that they do not feel

bored in learning and they can increase learning motivation.

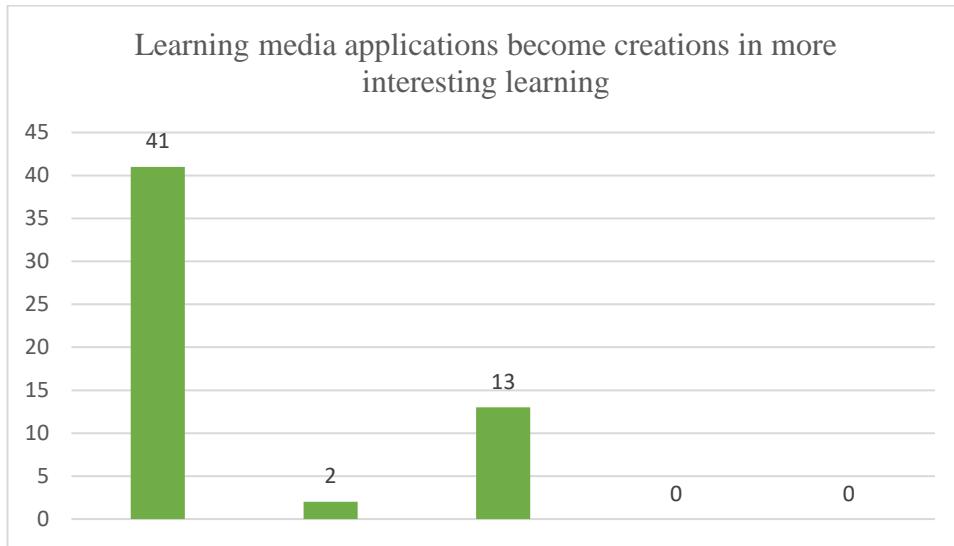


Based on the percentage of the diagram above related to learning media facilities as sufficient for educators, so that the learning carried out by educators is more effective and efficient. From the results of the respondents obtained, 40 people answered agree, 6 people chose to disagree, 0 people chose to disagree, 5 people chose strongly agree, 2 people chose normal. Judging from those who chose strongly agree and agree, it can be seen that media applications are a means for educators and students. Judging from those who choose strongly agree and agree, it can be proven that learning media applications and technology can be used as a means used in learning for educators and students. Judging from the respondents who chose disagree, disagree less, ordinary is an example of a school that does not want to advance with this technology and does not develop the learning media application as one of the supports in the learning process. So it can be concluded that learning media applications can be used as a media tool in a lesson at school.

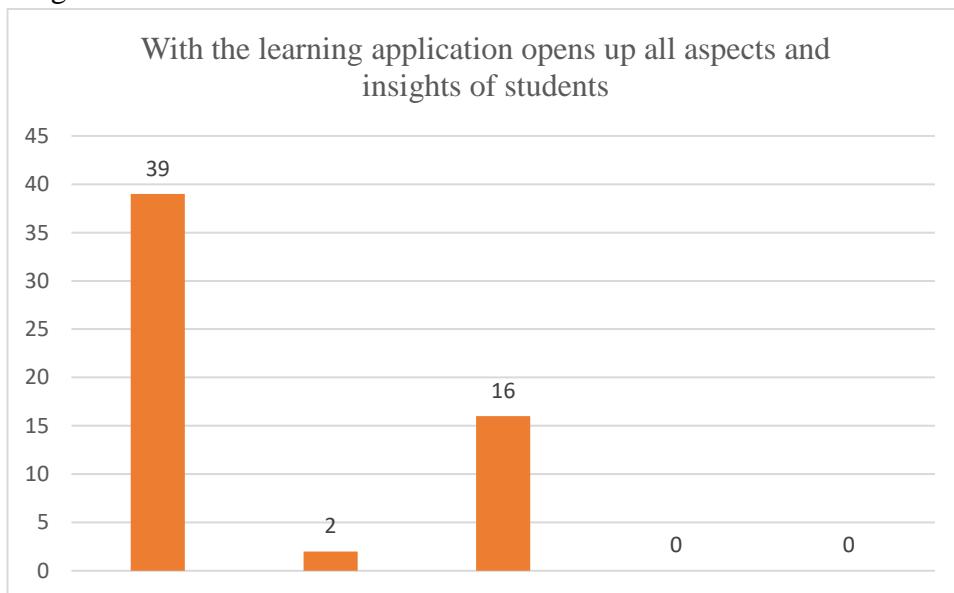


Judging from the results of the respondents above, 44 people answered agree, 10 people answered disagree, 2 people answered normal, 1 person answered disagree and 0

people answered disagree. It can be concluded that most respondents chose to agree because learning media can carry out learning properly and correctly so that learning becomes efficient. Respondents who chose to disagree, mediocre, and even disagree considered that the learning media was less able to develop students' knowledge so that it caused learning to be less effective and students did not understand learning.

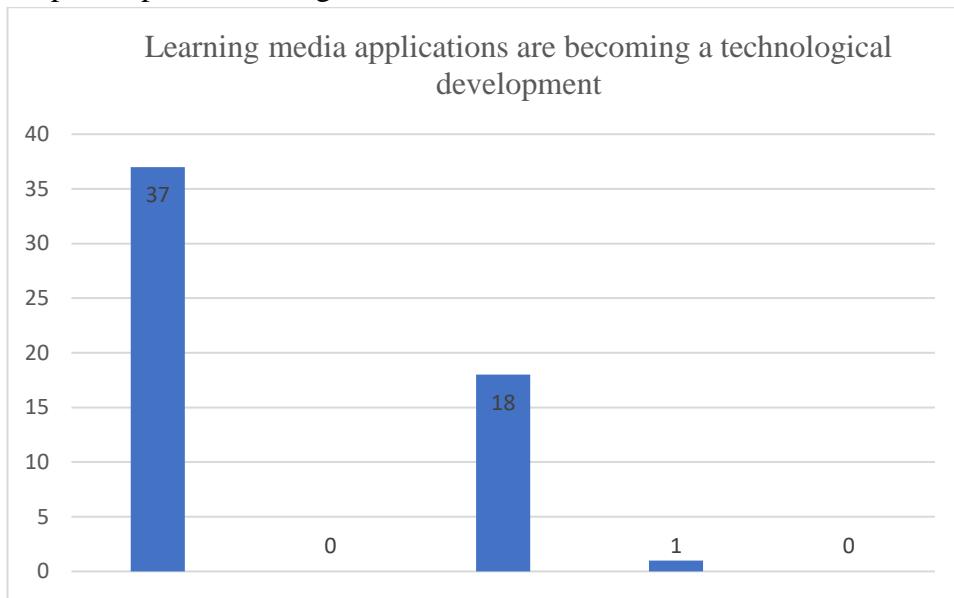


Judging from the results of the respondents in the diagram above, 41 people agreed, 2 people disagreed, 13 people answered strongly agree, 0 people answered normal, 0 people answered disagree. When viewed from the number of people who answer agree and strongly agree that the learning media application is a more interesting creation, because this media is very interesting and does not make students bored and not lazy in the learning process, because in general learning uses learning media with the lecture method, it would be nice for educators to use learning media applications that are more interesting and have creations.

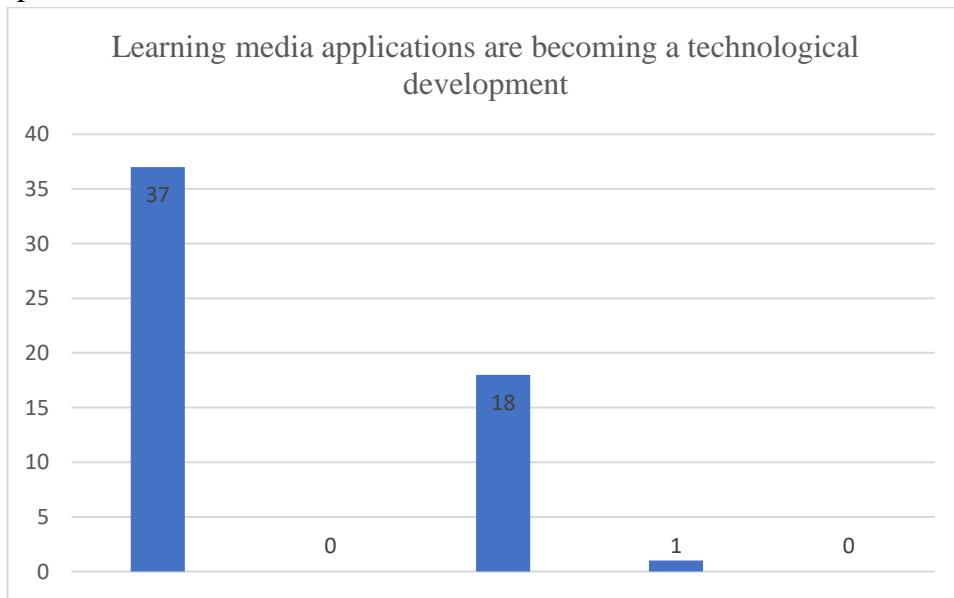


Judging from the results of the respondents in the diagram above, 39 people answered agree, 16 people strongly agreed, 2 people disagreed, 16 people answered

disagree, 0 people answered normal and disagree. If analyzed, students who answer agree and strongly agree because for them the use of this learning media application opens up all aspects and insights of students in the learning process, this can develop ideas from their knowledge. And students who answer disagree because of this there are separate obstacles such as their lack of understanding of the material and their lack of understanding in its application. So it can be concluded that it is very useful for students to open up all aspects and insights of students.



From the distribution of the questionnaire above, it can be seen that the results obtained, 37 people answered agree and 18 people answered strongly agree, 1 person answered normally, 0 people answered disagree and disagree. Judging from these results, many people agree and strongly agree that this can be used as a means of supporting technological developments. For respondents who choose ordinary, maybe there are separate obstacles. So it can be concluded that this media application is a technological development.



Based on the respondents in the diagram above, 40 people answered agree, 13 people answered strongly agree, 1 person answered disagree, 1 person answered normal, 1 person answered disagree. Judging from the answers that agree and strongly agree, it is possible that they can store material with the advantage of being able to access it at any time. This can be done to store important data, using a large capacity. When viewed from respondents who answered less agree, mediocre and disagree because they store a lot of data continuously in a learning media application will indirectly consume the data storage space. So it can be concluded that the use of learning media applications as a material storage container can be accessed at any time in the school concerned has gone well. Hopefully schools can increase the utilization of learning media applications as a support for the learning process.

So from the 10 surveys that the researcher has described, it can be concluded that media applications and technology are one of the media that support the learning process that can increase student interest in learning. Including the use of technology in increasing students' interest in learning is arguably optimal, because most respondents answered agree and strongly agree compared to the other 3 options. As a helper in understanding learning material, as one of the more interesting and creative means. It can even be a support for the creation of learning that can increase student interest in learning. Regarding the application of learning media and technology, educators cannot stand alone from its use, because learning will not be maximized, so educators need support from schools and students.

The results of this survey are indeed many who answer agree and strongly agree, but of the 50 people surveyed there are still some who think that the application of learning media and technology is still lacking in the development and potential of students in learning media applications, because there are several obstacles and obstacles felt by students, such as they lack understanding of this media application or in the application of the application system. Here the researcher hopes that future researchers will be able to maximize the application of learning media and technology as one of increasing student interest in learning not only focused on one subject but can be in all aspects.

CONCLUSIONS

Learning media and technology applications are one of the tools or aids used in the learning process and are one that can be used to store lesson information to educators and students, and can also be a way to increase student interest in learning. The purpose of this learning media and technology application is to be able to utilize for educators to develop ideas in delivering learning materials. Research on media applications and learning technology can be maximized, therefore researchers hope that this media application is not only used in learning but can be used in various aspects of learning and other environments. As has been explained that this media application and learning technology makes students not quickly bored and bored in learning, because of the interesting features and that is where educators are required to be more creative in using this learning media application.

Regarding researchers who use quantitative methods, this method makes it very easy for researchers to describe the questionnaires that have been distributed. Therefore, the researcher hopes that the respondents will respond well, this is very helpful in researching media applications and learning technology in increasing students' interest in learning at school. With this learning media and technology application, it helps students in developing broader insights so that educators and students are more advanced in the technological aspect. Applications can also be used as supporting media in the learning process. So researchers can conclude that media applications and learning technology can be used as support in increasing student interest in learning so that the learning process is more effective and maximized.

ACKNOWLEDGEMENT

The researcher would like to thank the respondents who have answered the survey questions that the researcher has distributed using an online-based questionnaire. Where responses from respondents help in research observations about the application of learning media and technology in increasing student interest in learning at schools used by educators and students in order to create effective learning. Hopefully this research can provide benefits for readers and further researchers.

REFERENCES

Botelho, M., Oancea, R., Thomas, H. F., Paganelli, C., & Ferrillo, P. J. (2018). Global networking: Meeting the challenges, facilitating collaboration. *European Journal of Dental Education*, 22, 3–9. <https://doi.org/10.1111/eje.12340>

Buda, A. (2020). Stumbling Blocks and Barriers to the Use of ICT in Schools: A Case Study of a Hungarian Town. *Informatics in Education*, 159–179. <https://doi.org/10.15388/infedu.2020.08>

Burgess, J., Watt, K., Kimble, R. M., & Cameron, C. M. (2018). Combining Technology and Research to Prevent Scald Injuries (the Cool Runnings Intervention): Randomized Controlled Trial. *Journal of Medical Internet Research*, 20(10), e10361. <https://doi.org/10.2196/10361>

Carpenter, J. P., & Harvey, S. (2020). Chapter 2: Perceived Benefits and Challenges of Physical Educators' Use of Social Media for Professional Development and Learning. *Journal of Teaching in Physical Education*, 39(4), 434–444. <https://doi.org/10.1123/jtpe.2020-0002>

Dang, T. K. A., Bonar, G., & Yao, J. (2021). Professional learning for educators teaching in English-medium-instruction in higher education: A systematic review. *Teaching in Higher Education*, 1–19. <https://doi.org/10.1080/13562517.2020.1863350>

de A. F. F. Finger, J., de Menezes, J. B. F., de Melo Franco, B. D. G., Landgraf, M., Raspor, P., & Pinto, U. M. (2020). Challenges of teaching food microbiology in Brazil. *Brazilian Journal of Microbiology*, 51(1), 279–288. <https://doi.org/10.1007/s42770-019-00107-0>

Ezzani, M. D., & King, K. M. (2018). Whose *Jihad*? Oral history of an American Muslim educational leader and U.S. public schools. *Journal of Educational Administration and History*, 50(2), 113–129. <https://doi.org/10.1080/00220620.2018.1448369>

Ferlay, J., Colombet, M., Soerjomataram, I., Mathers, C., Parkin, D. M., Piñeros, M., Znaor, A., & Bray, F. (2019). Estimating the global cancer incidence and mortality in 2018: GLOBOCAN sources and methods. *International Journal of Cancer*, 144(8), 1941–1953. <https://doi.org/10.1002/ijc.31937>

Fernandez-Carames, T. M., & Fraga-Lamas, P. (2018). A Review on the Use of Blockchain for the Internet of Things. *IEEE Access*, 6, 32979–33001. <https://doi.org/10.1109/ACCESS.2018.2842685>

Figueras-Maz, M., Grandío-Pérez, M.-M., & Mateus, J.-C. (2021). Students' perceptions on social media teaching tools in higher education settings. *Communication & Society*, 34(1), 15–28. <https://doi.org/10.15581/003.34.1.15-28>

Gan, W., Lin, J. C.-W., Fournier-Viger, P., Chao, H.-C., & Yu, P. S. (2019). A Survey of Parallel Sequential Pattern Mining. *ACM Transactions on Knowledge Discovery from Data*, 13(3), 1–34. <https://doi.org/10.1145/3314107>

Gautret, P., Lagier, J.-C., Parola, P., Hoang, V. T., Meddeb, L., Mailhe, M., Doudier, B., Courjon, J., Giordanengo, V., Vieira, V. E., Tissot Dupont, H., Honoré, S., Colson, P., Chabrière, E., La Scola, B., Rolain, J.-M., Brouqui, P., & Raoult, D. (2020). Hydroxychloroquine and azithromycin as a treatment of COVID-19: Results of an open-label non-randomized clinical trial. *International Journal of Antimicrobial Agents*, 56(1), 105949. <https://doi.org/10.1016/j.ijantimicag.2020.105949>

Guilding, C., Hardisty, J., Randles, E., Statham, L., Green, A., Bhudia, R., Thandi, C. S., Teodorczuk, A., Scott, L., & Matthan, J. (2020). Designing and evaluating an interprofessional education conference approach to antimicrobial education. *BMC Medical Education*, 20(1), 360. <https://doi.org/10.1186/s12909-020-02252-9>

Hanney, R., & Skirkeviciute, G. (2020). Reflection, identity, community: Affordances of blogging for social interaction and reflective dialogue. *Education and Information Technologies*, 25(3), 1553–1569. <https://doi.org/10.1007/s10639-019-10030-4>

Harvey, S., & Carpenter, J. P. (2020). Chapter 3: Genesis and Change in Physical Educators' Use of Social Media for Professional Development and Learning. *Journal of Teaching in Physical Education*, 39(4), 445–453. <https://doi.org/10.1123/jtpe.2019-0284>

Hazelton, L. M., Gillin, L. M., Kerr, F., Kitson, A., & Lindsay, N. (2019). An ageing well collaboration: Opportunity or wicked problem. *Journal of Business Strategy*, 40(1), 18–27. <https://doi.org/10.1108/JBS-01-2018-0008>

Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., Zhang, L., Fan, G., Xu, J., Gu, X., Cheng, Z., Yu, T., Xia, J., Wei, Y., Wu, W., Xie, X., Yin, W., Li, H., Liu, M., ... Cao, B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet*, 395(10223), 497–506. [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5)

Human tuning fork culture: Conceptual approaches to the study of the phenomenon. (2019). *Perspectives of Science and Education*, 42(6), 21–31. <https://doi.org/10.32744/pse.2019.6.2>

Jenkins, E. K., Slemon, A., O'Flynn-Magee, K., & Mahy, J. (2019). Exploring the implications of a self-care assignment to foster undergraduate nursing student mental health: Findings from a survey research study. *Nurse Education Today*, 81, 13–18. <https://doi.org/10.1016/j.nedt.2019.06.009>

Jordaan, M. (2018). Die belang van kritiese selfrefleksie deur joernalistiekopvoeders. *Tydskrif Vir Geesteswetenskappe*, 58(4–1), 826–840. <https://doi.org/10.17159/2224-7912/2018/v58n4-1a13>

Kim, S., & Yoon, Y. (2021). ACP Model for Vehicle Monitoring Based on CPS. *Human-Centric Computing and Information Sciences*, 1(0), 1–13. <https://doi.org/10.22967/HCIS.2021.11.005>

Kulkarni, J. (2021). Multiband triple folding monopole antenna for wireless applications in the laptop computers. *International Journal of Communication Systems*, 34(8). <https://doi.org/10.1002/dac.4776>

Kumar, N., Rahman, E., & Adds, P. J. (2018). An effective and novel method for teaching applied facial anatomy and related procedural skills to esthetic physicians. *Advances in Medical Education and Practice*, Volume 9, 905–913. <https://doi.org/10.2147/AMEP.S181874>

Lee, S., Lim, J., Lee, S., Heo, Y., & Jung, D. (2022). Group-tailored feedback on online mental health screening for university students: Using cluster analysis. *BMC Primary Care*, 23(1), 19. <https://doi.org/10.1186/s12875-021-01622-6>

Li, Q., Guan, X., Wu, P., Wang, X., Zhou, L., Tong, Y., Ren, R., Leung, K. S. M., Lau, E. H. Y., Wong, J. Y., Xing, X., Xiang, N., Wu, Y., Li, C., Chen, Q., Li, D., Liu, T., Zhao, J., Liu, M., ... Feng, Z. (2020). Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus–Infected Pneumonia. *New England Journal of Medicine*, 382(13), 1199–1207. <https://doi.org/10.1056/NEJMoa2001316>

Mikelli, D., & Dawkins, S. (2020). VR Kaleidoscope: Reconfiguring space and place through community-based media literacy interventions. *Media Practice and Education*, 21(1), 54–67. <https://doi.org/10.1080/25741136.2019.1681223>

Moon, E. C. (2018). Teaching students out of harm’s way: Mitigating digital knowledge gaps and digital risk created by 1:1 device programs in K-12 education in the USA. *Journal of Information, Communication and Ethics in Society*, 16(3), 290–302. <https://doi.org/10.1108/JICES-02-2018-0012>

Nørve Eidsvik, O. A., & Schjølberg, I. (2018). Finite element cable-model for Remotely Operated Vehicles (ROVs) by application of beam theory. *Ocean Engineering*, 163, 322–336. <https://doi.org/10.1016/j.oceaneng.2018.06.012>

O’Donovan, D. (2018). Bilateral benefits: Student experiences of work-based learning during work placement. *Industry and Higher Education*, 32(2), 119–128. <https://doi.org/10.1177/0950422218761273>

Pase, C., Mathias, A. D., Garcia, C. D., & Garcia Rodrigues, C. (2018). Using Social Media for the Promotion of Education and Consultation in Adolescents Who Have Undergone Kidney Transplant: Protocol for a Randomized Control Trial. *JMIR Research Protocols*, 7(1), e3. <https://doi.org/10.2196/resprot.8065>

Reis, H., Eusébio, I., Sousa, M., Ferreira, M., Pereira, R., Dias, S., & Reis, C. I. (2021). Regul-A: A Technological Application for Sensory Regulation of Children with Autism Spectrum Disorder in the Home Context. *International Journal of Environmental Research and Public Health*, 18(19), 10452. <https://doi.org/10.3390/ijerph181910452>

Ross, P., Moon, K., Paras, A., Long, P., Paterson, S., Ghani, M., Knott, C., Lister, B., Nickson, C., & Massey, D. (2021). The Australian and New Zealand Clinician Educator Network (ANZCEN) Unconference: What’s an unconference and how can it develop communities of practice? *Journal of Interprofessional Care*, 35(2), 310–315. <https://doi.org/10.1080/13561820.2020.1724902>

Rotenstein, L. S., Torre, M., Ramos, M. A., Rosales, R. C., Guille, C., Sen, S., & Mata, D. A. (2018). Prevalence of Burnout Among Physicians: A Systematic Review. *JAMA*, 320(11), 1131. <https://doi.org/10.1001/jama.2018.12777>

Saleh, L. M., Russeng, S. S., Tadjuddin, I., Syafitri, N. M., Yanti, I. H., & Yusbud, M. (2021). The application of FGD to support concept of National Policy on health and safety work procedures on ATC employees in Indonesia. *Gaceta Sanitaria*, 35, S425–S427. <https://doi.org/10.1016/j.gaceta.2021.10.067>

Scheim, A. I., & Bauer, G. R. (2019). The Intersectional Discrimination Index: Development and validation of measures of self-reported enacted and anticipated discrimination for intercategorical analysis. *Social Science & Medicine*, 226, 225–235. <https://doi.org/10.1016/j.socscimed.2018.12.016>

Schmidt, T., Buchert, R., & Mau-Holzmann, U. (2019). Integration moderner Lehrmethoden in den Humangenetik-Unterricht in Tübingen. *Medizinische Genetik*, 31(3), 313–319. <https://doi.org/10.1007/s11825-019-00250-x>

Steyn, T., & Heystek, J. (2018). Kan die leierskorps van 'n onderpresterende Suid-Afrikaanse primêre skool ten spyte van 'n uitdagende skoolkonteks die skip van rigting laat verander? 'n Gevallestudie. *Tydskrif Vir Geesteswetenskappe*, 58(2), 361–375. <https://doi.org/10.17159/2224-7912/2018/v58n2a10>

Tang, N., Li, D., Wang, X., & Sun, Z. (2020). Abnormal coagulation parameters are associated with poor prognosis in patients with novel coronavirus pneumonia. *Journal of Thrombosis and Haemostasis*, 18(4), 844–847. <https://doi.org/10.1111/jth.14768>

Théry, C., Witwer, K. W., Aikawa, E., Alcaraz, M. J., Anderson, J. D., Andriantsitohaina, R., Antoniou, A., Arab, T., Archer, F., Atkin-Smith, G. K., Ayre, D. C., Bach, J.-M., Bachurski, D., Baharvand, H., Balaj, L., Baldacchino, S., Bauer, N. N., Baxter, A. A., Bebawy, M., ... Zuba-Surma, E. K. (2018). Minimal information for studies of extracellular vesicles 2018 (MISEV2018): A position statement of the International Society for Extracellular Vesicles and update of the MISEV2014 guidelines. *Journal of Extracellular Vesicles*, 7(1), 1535750. <https://doi.org/10.1080/20013078.2018.1535750>

Thwin, E. P. A., & Lwin, Z. (2018). Simple Interactive Lecturing Strategies for Fostering Students' Engagement and Active Participation. *Medical Science Educator*, 28(1), 203–209. <https://doi.org/10.1007/s40670-017-0492-3>

Turesson, C., Liedberg, G., & Björk, M. (2022). Development of a Digital Support Application With Evidence-Based Content for Sustainable Return to Work for Persons With Chronic Pain and Their Employers: User-Centered Agile Design Approach. *JMIR Human Factors*, 9(1), e33571. <https://doi.org/10.2196/33571>

Wang, S., Tuor, T., Salonidis, T., Leung, K. K., Makaya, C., He, T., & Chan, K. (2019). Adaptive Federated Learning in Resource Constrained Edge Computing Systems. *IEEE Journal on Selected Areas in Communications*, 37(6), 1205–1221. <https://doi.org/10.1109/JSAC.2019.2904348>

Zhang, C., Tian, Y., & Zhang, J. (2022). Complex image background segmentation for cable force estimation of urban bridges with drone-captured video and deep learning. *Structural Control and Health Monitoring*, 29(4). <https://doi.org/10.1002/stc.2910>

Copyright Holder :

© Prakash Puhka et al. (2022).

First Publication Right :

© World Psychology

This article is under:

