

PENGGUNAAN MEDIA DIGITAL DAN TEKNOLOGI PENDIDIKAN DALAM PEMBELAJARAN

THE USE OF DIGITAL MEDIA AND EDUCATIONAL TECHNOLOGY IN LEARNING

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ABSTRACT

Digital content in the changing times in building a digital ecosystem is of course also supported by healthy internet behavior, these two things are important and cannot be separated. The internet has opened various information doors that contain various contents, both positive content and negative content. If we don't have provision in how to use it, the internet will become a scourge for its users. Therefore debriefing and creating positive content is important, providing continuous education to every user and content creator, so that they have good literacy in using digital technology, making the internet part of an effective and positive learning tool. Digital content will act like currency in a digital social education environment, various communications will be represented by playing or utilizing digital content. Of course, digital content delivery modes in the future will become easier, cheaper, faster and more varied as capacity (bandwidth) develops or increases, devices are more innovative, and it is also easy to get cloud-based applications and storage space. The expectations of the current generation will be different from previous generations, they will need the practice of sharing experiences through digital content including learning content, various digital communication media will become richer with knowledge sources and digital content. On the other hand, there are also many tools to support creative content creation in digital form and are adaptive to the needs of users and the needs of their media distribution. language boundaries, cultural boundaries, age limits and other boundaries.

Keywords: Digital Media, Educational Technology, Learning

ABSTRAK

Konten Digital pada perkembangan jaman dalam membangun ekosistem digital tentunya juga didukung dengan perilaku internet sehat, kedua hal ini menjadi penting dan tak bisa terpisahkan. Internet telah membuka berbagai pintu informasi yang berisi berbagai konten, baik konten positif dan konten negatif. Bila kita tidak memiliki bekal dalam cara pemanfaatannya maka internet akan menjadi momok bagi penggunanya. Oleh karena itu pembekalan dan menciptakan konten positif menjadi penting, memberikan edukasi berkesinambungan kepada setiap pengguna dan konten kreator, agar memiliki literasi yang baik dalam menggunakan teknologi digital, menjadikan internet sebagai bagian dari perangkat pembelajaran yang efektif dan positif. Konten digital akan berperan seperti mata uang dalam sebuah lingkungan digital sosial pendidikan, berbagai komunikasi akan diwakilkan dengan cara memutar atau memanfaatkan sebuah konten digital. Tentunya mode pengiriman konten digital kedepan akan menjadi lebih mudah, lebih murah, lebih cepat dan lebih bervariasi seiring dengan berkembangnya atau meningkatnya kapasitas (bandwidth), gawai yang lebih inovatif, dan juga mudahnya mendapatkan aplikasi serta ruang penyimpanan berbasis awan. Ekspektasi generasi masa kini akan berbeda dengan generasi

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sebelumnya, mereka akan membutuhkan praktik berbagi pengalaman melalui konten digital termasuk konten pembelajaran, berbagai media komunikasi digital akan menjadi lebih kaya dengan sumber ilmu serta konten digital. Di lain sisi, perangkat pendukung pembuatan konten kreatif dalam bentuk digital juga menjadi banyak pilihannya dan bersifat adaptif dengan kebutuhan pengguna maupun kebutuhan media distribusinya, kita juga sudah banyak menyaksikan bagaimana masyarakat pendidikan membuat berbagai konten digital lalu mendistribusikan secara masif, hebatnya konten yang dibuat dapat melintasi batas bahasa, batas budaya, batas usia dan batas-batas lain.

Kata kunci: Media Digital, Teknologi Pendidikan, Pembelajaran

PRELIMINARY

Several things have fundamentally changed, marked by a number of challenges that arise due to digital content that affects life, including in learning. The following are some of the challenges that must be faced when individuals gain experience from most people who interact with digital content: The first challenge is how we understand and then respond to the values contained in the experiences of others that are shared through digital content. Are interactions with digital content interesting, educational and useful? Does it suit your needs? Will the content be used for reference in carrying out the learning process? etc. In understanding and assigning values to digital content, individuals or users need to set indicators according to their abilities and needs.

The second challenge is how to create digital content metadata that is integrated with content and of course validated metadata. Initial metadata will be obtained from content creators, then can be added from various sources that have the same experience and engagement with digital content, such as from users, from information distributors and input metadata from communities that have the same vision and goals as creators. content. The third challenge is how to open access to digital content in uploading and downloading, of course the methods must be properly adapted to the needs and abilities of the user. It must be something that is in accordance with personal needs, responsive and adaptive. Fourth is how to utilize digital content that can be collaborated/combined with other digital content in terms of format, context, language, music, and text, and then digital content becomes new digital content that can increase creativity, interactivity, foster positive and constructive learning that Certainly not infringe copyright. The next challenge is, the social gap that is formed based on the level of economic ability, resulting in different habits or cultures on how to access information in the form of digital content, coupled with the digital literacy gap, which will affect ways of obtaining digital content in learning. Transformation is actually able to provide solutions to various gaps, eliminate obstacles caused by old patterns, then utilize technology and produce a positive added value from a learning process from upstream to downstream, so as to get a new experience for actors and users of technology. digital⁽¹⁾.

In addition, the challenge that is often found is the availability of adequate, clean and healthy facilities. Sanitation facilities are all facilities that support environmental sanitation. Facilities and infrastructure that are of concern related to environmental health aspects include the provision of clean water, the condition of sewerage channels, the condition of public toilets, and the condition of the hygiene office space (Fatmawati et al, 2018)⁽²⁾. The use of digital media and educational technology in learning also requires a hygienic and healthy environment, this is very important considering that the learning process will run well if it is equipped with a clean and comfortable room.

RESEARCH METHOD

The research method according to Sugiyono (2017: 3) is basically a scientific way to obtain data with specific purposes and uses. Based on this, there are four keywords that need attention, namely the scientific method, data, purpose and use⁽³⁾. The research method used is a mixed method. According to Sugiyono (2016), a mixed research method is a research method that combines two qualitative and quantitative research methods in a research activity so that more comprehensive, valid, reliable and objective data will be obtained. Research that uses mixed methods can help researchers to answer research questions that cannot be answered fully if only using one research approach. In addition, combined research results can be proven repeatedly, so that research triangulation becomes more solid, meaningful, and logical. The evidence produced in joint research is also considered more comprehensive because there are two types of data that are in accordance with the research problem or phenomenon (Yusuf, 2017, p. 430)⁽⁴⁾. To find out the effectiveness of using online learning media in the learning process, mixed/combined research methods are considered appropriate and appropriate in their measurement.

In the combined research method there are several strategies in its implementation, and the sequential explanatory strategy is the strategy chosen and used. A sequential explanatory strategy is carried out by conducting quantitative research first and then conducting analysis, and complementing the results with qualitative research analysis. In sequential explanatory research, quantitative results are usually used to select participants and questions to use in collecting qualitative data. The implementation procedure involves collecting survey data, analyzing survey data, interviewing for qualitative data that can be used to explain the responses to the survey results. Quantitative data in this study will be collected through surveys and qualitative data will be collected through group discussion forums. The results of the distributed survey will determine which survey participants will participate in the group discussion forum to see participants' perceptions of learning activities using online media Academia Edu conducted by teachers and students in Indonesia.

1.1. Surve

The survey method is a structured questionnaire given to a sample of the research target population. This questionnaire is designed to obtain specific information from research participants. Participants can be asked questions about their behavior, intentions, attitudes, awareness, motivation, and lifestyle. Existing questions can be asked orally, in writing, or using a computer (Malhotra, 2017, p. 268)⁽⁵⁾.

Survey questionnaires can be administered in four ways, namely online surveys, telephone surveys, face-to-face surveys, and postal surveys. Online surveys are conducted via the internet, telephone surveys are conducted via mobile devices, face-to-face surveys are conducted at home or work, and postal surveys are conducted by sending a questionnaire by post. In this study the questionnaire will be administered via the internet connected to the participant's digital device.

1.1.1. Population

According to Yusuf (2017, p. 147) population is the totality of all possible values rather than certain characteristics of the number of objects you want to study. The population in a study can vary depending on the problem to be investigated. Population can be human, animal, thing or any object. The population is the limit of a study that has certain characteristics so that conclusions can be drawn from the state of the population.

The population in this study are digital users who are students in tertiary institutions and high schools/ vocational schools in the city of Gorontalo.

1.1.2. Sample

Due to the large number of study population, it is necessary to determine the sample as one of the steps in distributing the survey. The sample is a sub-group of the population selected to be able to participate in this study (Malhotra, 2017, p. 413). This study uses a non-probability sampling technique which is carried out with a selected type of sampling or what is commonly called purposive sampling. The non-probability sampling technique is used because there is no list of names of all members of the population available and research will collect more data for deeper exploration.

The selected sample is used in this study because there are certain characteristics or qualities of the desired respondents. In addition, the characteristics of the selected sample have been based on research considerations with the criteria of Digital Users who are high school/vocational high school students of the same level, and students at UBMG colleges and the Gorontalo Ministry of Health Polytechnic. Here is a list of selected samples:

Tabel 1. Digital User List

| No. | Digital User | Activity Score |
|-----|--------------|----------------|
| 1. | PD1 | 86 |
| 2. | PD2 | 85 |
| 3. | PD3 | 87 |
| 4. | PD4 | 88 |
| 5. | PD5 | 85 |
| 6. | PD6 | 89 |
| 7. | PD7 | 87 |
| 8. | PD8 | 88 |
| 9. | PD9 | 85 |
| 10. | PD10 | 85 |
| 11. | PD11 | 90 |
| 12. | PD12 | 87 |
| 13. | PD13 | 86 |
| 14. | PD14 | 88 |
| 15. | PD15 | 89 |

Description: The Activeness Score shows the interaction of the learning process in the use of digital media.

RESULTS OF IMPLEMENTATION AND DISCUSSION

2.1. Results Of Implementation

The implementation of learning using digital media has been carried out from the beginning of the semester to students in tertiary institutions. The following is the achievement of using digital learning media in terms of activity and understanding.

Tabel 2. Achievement of Using Digital Learning Media

| No | Digital User | Activity Score | Understanding |
|-----|--------------|----------------|---------------|
| 1. | PD1 | 86 | 87 |
| 2. | PD2 | 85 | 86 |
| 3. | PD3 | 87 | 90 |
| 4. | PD4 | 88 | 91 |
| 5. | PD5 | 85 | 86 |
| 6. | PD6 | 89 | 93 |
| 7. | PD7 | 87 | 90 |
| 8. | PD8 | 88 | 89 |
| 9. | PD9 | 85 | 87 |
| 10. | PD10 | 85 | 88 |
| 11. | PD11 | 90 | 91 |
| 12. | PD12 | 87 | 90 |
| 13. | PD13 | 86 | 87 |
| 14. | PD14 | 88 | 90 |
| 15. | PD15 | 89 | 90 |

The Activeness Score shows the interaction of the learning process on the use of digital learning media and understanding seen from the way Digital Users respond to assignments given through open discussion and uploading assignments. It can be seen that student activity can support understanding scores on learning that is carried out using digital media and educational technology in learning.

2.2. Discussion

The use of online digital media through the learning process begins with planning the use of digital media in learning in tertiary institutions and high schools/vocational schools on the same level. Then socialization was given to the teachers about how to make and implement it in the learning process. At the implementation stage the teacher can use digital media and educational technology in learning at school or college, so that it can support the effectiveness of learning as expected.

Learning to use digital media is required to be able to facilitate learning in today's developments. So that support in the form of facilities, adequate internet network, professional teaching staff is needed.

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In practice, the use of digital media and educational technology can be used at the SMK/SMA level and by students in tertiary institutions. In addition to practical and academic use, it can also save learning materials in the form of paper, books, pens, pencils, erasers, type x and so on. The main weakness in using online media is that there are several features that will be active later after being paid for, but for the learning process these features don't have to be used let alone students.

Khairun Anam (2021)⁽⁶⁾ in his writing entitled "EFFECTIVENESS OF USING DIGITAL MEDIA IN THE TEACHING AND LEARNING PROCESS". By using digital media in the teaching and learning process, it can be concluded that one of the teacher's methods is to liven up the classroom atmosphere so that discussions between students occur, making it easier for the teacher to deliver material and students easily understand the material. Fiqh subject teachers use digital media in learning by displaying PowerPoint slides, Prizi slides and interesting learning videos. By using digital media, the teaching and learning process becomes more effective and efficient.

CONCLUSION

The results of the study show that the use of digital learning media and educational technology is capable and effective in facilitating the learning process both in tertiary institutions and in high schools/vocational schools on the same level. Students can understand how to use it easily, the learning process is interesting and fun.

The use of digital media and educational technology in learning in the changing times must be implemented. Given the condition of students in Indonesia, most of them already use gadgets, cellphones, laptops and so on. A significant obstacle is that there are still schools or tertiary institutions whose teachers do not understand the use of digital and educational technology, so that in practice they still use the basic learning process, namely the lecture method and reading books.

THANK-YOU NOTE

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REFERENCES

- (1) Lindsay Herbert. (2017). *Digital Transformation : Build Your Organization's Future for the Innovation Ages*.
- (2) Bastian, J, Winardi, R. D, & Fatmawati, D. (2018). *Metoda Wawancara*. Diambil tanggal 17 Desember 2019. Diambil dari <https://researchgate.net/publication/331556677>.
- (3) Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung : Alfabeta, CV.
- (4) A Muri Yusuf. 2017. *Metode Penelitian: Kuantitatif, Kualitatif, Dan Penelitian Gabungan*. Jakarta: Kencana.
- (5) Malhotra, N. K., Nunan, D., & Birks, D. F. (2017). *Marketing Research: An Applied Approach*. Harlow: Pearson Education Limited.
- (6) Khairul Anam. 2021. *EFEKTIFITAS PENGGUNAAN MEDIA DIGITAL DALAM PROSES BELAJAR MENGAJAR*, Genderang Asa: Journal Of Primary Education.