

The Role of Technology on Students' Character Education

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Abstract. This study aims to determine the role of technology in student character education. The role of technology in general aims to make students understand the technological devices but can not be separated from student character education. The results of this study found that character education is very important in the framework of developing quality, dignified, and characterized human resources, so it needs to be truly maintained so that the use of technology does not interfere with the formation of students' character.

1. Introduction

Science and technology continue to develop and its influence extends to various fields of life, including education. So the role of education is very important to develop positive impacts and improve their negative impacts. States Technology is the art of utilizing scientific knowledge [1]. While Alisyahbana (1980) states that technology is a way to do something to meet human needs with the help of tools and reason so as to extend, strengthen, or make more powerful members of the body, five senses, and the human brain [2].

According to Law No.20 of 2003 concerning National Education System Article 3, national education functions to develop capabilities and shape the character and civilization of a dignified nation in order to educate the life of the nation, aiming at developing the potential of students to become human beings who believe in and fear God. The Almighty, having noble, healthy, knowledgeable, capable, creative, independent, and being a democratic and responsible citizen. Referring to the objectives of national education, our educational goals are not only emphasizing the development of the intellectual aspects of students, but also on the emotional and spiritual aspects or character of students. The use of technology in the world of education allows teachers, schools and parents recognize the character of students in greater depth. Technology can also help their role in providing learning material that is more easily absorbed and understood by students.

2. Method

The approach used in this paper is *ex post facto*. By using the *ex post facto* approach, the authors hope the purpose of this study can be to establish experimental control conditions to create situations in which a single variable effect can be studied [3]. The use of research methods with an *ex post facto* approach often explains or describes the causal relationship between an event and reality. Analysis and data in writing this article are sourced from books, national and international journals, other documents, and observations made by the writer, both directly and indirectly.

3. Result and Discussion



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3.1. Technology Development in Education

The development of technology has had an influence on the world of education, especially in the learning process. According to Sudibyo (2011), there are five shifts in the learning process related to the development of the use of technology, namely: 1) from training to appearance, 2) from classrooms to wherever and whenever, 3) from paper to "on line" or channels, 4) from physical facilities to network facilities; 5) from cycle time to the real time. In the process of education, communication is carried out using communication media such as telephone, computer, internet, e-mail, and so on [4]. Interaction between teachers and students is not only done through face-to-face relationships, but also done using these media. With technology, teachers can provide services without having to deal directly with students. Students can obtain information in a broad scope from various sources through cyberspace using computers or the internet.

With the rapid technological advances in education, now the most recent thing is the teaching process carried out using the internet. Another term that is increasingly plumper now is e-learning, which is a learning model using communication media and information technology, especially the internet. The presence of the internet is the best vehicle to make it easier for students to gain access to unlimited data and information about the material taught in schools.

3.2. Impact of Technology in Education

Learning technology continues to experience development along with the times. In the implementation of daily learning often encounter the use of technological developments in the world of education, as is often done by teachers or lecturers that is combining technology tools in the learning process. The internet is one of the inexpensive communication tools which allows interaction between two or more people. The capabilities and characteristics of the internet enable the process of distance learning (E-learning) to become more effective and efficient so that maximum results can be obtained.

The impact arising from the use of information and communication technology in the world of education can be divided into positive impacts and negative impacts. The positive impact of information technology in the world of education is: the information needed will be faster and easier to access for the benefit of education, innovation in learning is increasingly developing with e-learning innovations that further facilitate the educational process, advances in information and communication technology will also enable the development of classes virtual or teleconference-based class that does not require the educator and students to be in one room, the administration system in an educational institution will be easier and smoother because the application of information and communication telecommunications systems [5].

Several negative impacts of the use of information technology in education can be seen, among others: 1) Students become addicts from the existence of excessive cyberspace. This can happen when students do not have a skeptical and critical attitude towards something new. Especially in the context of cyberspace (the internet) they have indirectly entered into an over free world, so it is very important that the two attitudes above become a bastion or filter of all available information sources. 2) Criminal acts. In the world of education this can happen, for example theft of important documents or assets about an educational order that is actually kept secret (documents regarding the final or state examination) with the internet media. 3) Gives an apathetic attitude to each individual, both for students and teachers. This can be seen, for example, in learning systems. Where learning systems do not meet each other between students and teachers, it can occur that students are less active in the learning system and the results are not optimal [4].

3.3. The Importance of Students' Character Education

Education is a learning process for students to be able to understand, understand, and make humans more critical in thinking. Learning is done both in terms of subject matter at school and the attitude that must be done by a teacher to students so that students can imitate the good things done by teachers. One of them uses a strategy. The form of a special strategy at the school level, it is expected that the learning

objectives, by leading to the formation of character can be achieved, namely forming a nation of morality, morality, tolerance, mutual cooperation, dynamic development and orientation.

Technology is very influential in aspects of human life and plays a role in the life of the wider community, especially the role of technology in the field of education. In education itself, technology now has its own role in the teaching and learning process. The teacher's role is very influential in the character development of students, each behavior is always imitated by students, especially elementary school students who are easier to imitate what teachers do such as dressing, speaking, and so forth. So a teacher plays an important role in developing student character because teachers must be able to model good things for their students.

Character is a way of thinking and behaving that characterizes each individual to live and cooperate, both within the scope of family, community, nation and state. Good character individuals are individuals who can make decisions and are ready to take responsibility for the consequences of the decisions they make [6]. Character education should bring students in cognitive recognition of values, the appreciation of values affective [7]. And finally to experience real value. Besides that, character is a collection of values that lead to a system, which underlies the thoughts, attitudes and behaviors displayed.

Lickona (1991) states there are 11 principles for character education to be effective: (1) develop core ethical values and supporting performance values as a foundation. (2) define comprehensive "character" that includes thoughts, feelings, and behavior. (3) uses a comprehensive, deliberate and proactive approach. (4) create a caring school community. (5) give students the opportunity to take moral action. (6) create a meaningful and challenging academic curriculum that respects all students, develops character, and helps students succeed. (7) try to encourage student self-motivation. (8) involve school staff as a learning and moral community. (9) foster togetherness in moral leadership. (10) involve families and community members as partners, and (11) evaluation of the character of the school, the staff's function manifests good character reflect curiosity and curiosity about everything that is seen, heard and learned, in more depth [8].

In another meaning, character can be also to be seen on nationalism. Nationalism is attitudes and actions that place the interests of the nation and the State above personal or individual and group interests including love the motherland, attitudes and behaviors that reflect a sense of pride, loyalty, care and high respect for language, culture, economy, politics, and so on, so that it is not easy to accept offers from other nations that can harm the nation itself [9]–[11]. Based on the previous definition, nationalists only limited the relationship between the state and its citizens as a reflection of the nation's character.

The operationalization of student character, operationally based on several definitions [12]–[14], deals with the following:

- a. *Appreciating Achievement*, which is an open attitude towards the achievements of others and recognizing one's own shortcomings without reducing the spirit of higher achievement; Communicative, happy to be friendly or proactive, namely open attitudes and actions towards others through polite communication so as to create good collaborative collaboration; Peace of love, namely attitudes and behaviors that reflect an atmosphere of peace, security, calm and comfort for their presence in a particular community or community;
- b. *Likes to read*, which is the habit of without coercion to provide special time to read various information, both books, journals, magazines, newspapers and so on, giving rise to policies for him;
- c. *Care for the environment*, namely attitudes and actions that always try to maintain and preserve the surrounding environment;
- d. *Social care*, namely attitudes and actions that reflect concern for other people and the people who need it;
- e. *Responsibility*, namely the attitude and behavior of a person in carrying out their duties and obligations, both related to oneself, social, community, nation and religion.

3.4. *The Role of Technology in Students' Character Education*

The use of technology in education needs to be designed, planned, implemented, and assessed in the context of developing Indonesian people as fully as described above. To maintain that the use of

technology continues to make a significant contribution to (1) the development of students into human beings with intellectual character and intellectual intelligence and (2) empowering educators and related education personnel, the following principles should be applied:

- a. Utilization of technology in education should consider the characteristics of students, educators, and education personnel in overall Technology decision making
- b. Utilization of technology should be designed to strengthen the interest and motivation of users to use it merely to improve themselves, both in terms of intellectual, spiritual (spiritual), social, and physical.
- c. Utilization of technology should foster awareness and confidence in the importance of activities interacting directly with humans (face to face), with the socio-cultural environment (meetings, museums, historic places), and the natural environment (exploration) in order to be able to maintain social values and humanities (arts and culture), and love of nature as gifts from God Almighty.
- d. Utilization of technology should ensure that the target group can still appreciate simple communication technology and learning activities without technology because of the demand for mastering related competencies in order to develop the full potential of students equally.
- e. Utilization of technology should encourage users to be more creative and innovative so that they are not only satisfied to be consumers of technology-based information. Furthermore, so that the application of character education through technology can run effectively in achieving its objectives, teachers should be able to provide material in interactive ways, and be able to make their students creative. The learning process must also be fun and meaningful [15].

The understanding the character of student learning is very important to ensure subject matter can be more easily absorbed and understood. All can be facilitated with the help of technology. Technology makes it easy for teachers and other teaching staff to deliver material with several deliver methods.

4. Conclusion

Basically, technology is a tool. Therefore, in order to be more positive for students, cultural utilization and character education are needed so that they do not lose local cultural wisdom. Forming the character of students is indeed not as easy as turning the palm of the hand. Therefore, it takes a strong vision and mission of the school in building student character.

References

- [1] F. E. Kast and J. E. Rosenzweig, "Management and Accelerating Technology," *California Management Review*, vol. 6, no. 2, pp. 39–48, 1963.
- [2] I. Alisyahbana, *Teknologi dan perkembangan*. Yayasan Idayu, 1980.
- [3] H. G. Lord, "Ex Post Facto Studies as a Research Method. Special Report No. 7320.," 1973.
- [4] L. Sudibyoy, "Peranan dan Dampak Teknologi Informasi dalam Dunia Pendidikan di Indonesia," *Widyatama*, vol. 20, no. 2, 2013.
- [5] C. E. Siagian, "Gambaran Karakteristik Kanker Pankreas di RSVP H. Adam Malik Medan Tabun 2011-2014," 2015.
- [6] Suyanto, *Urgensi Pendidikan Karakter*. Jakarta: Direktorat Jenderal Manajemen Pendidikan Dasar dan Menengah, 2009.
- [7] A. Buchori and R. D. Setyawati, "Development learning model of character education through e-comic in elementary school," *International Journal of Education and Research*, vol. 3, no. 9, pp. 369–386, 2015.
- [8] T. Lickona, *Educating for character: How our schools can teach respect and responsibility*. Bantam, 2009.
- [9] D. Druckman, "Nationalism, patriotism, and group loyalty: A social psychological perspective," *Mershon international studies review*, vol. 38, no. Supplement_1, pp. 43–68, 1994.
- [10] M. Guibernau, *Nationalisms: The nation-state and nationalism in the twentieth century*. John Wiley & Sons, 2013.

- [11] M. Keating, *Nations against the state: The new politics of nationalism in Quebec, Catalonia and Scotland*. Springer, 1996.
- [12] M. Newman, M. Trenchs-Parera, and M. Pujol, "Core academic literacy principles versus culture-specific practices: a multi-case study of academic achievement," *English for Specific Purposes*, vol. 22, no. 1, pp. 45–71, 2003.
- [13] K. Ragozzino, H. Resnik, M. Utne-O'Brien, and R. P. Weissberg, "Promoting academic achievement through social and emotional learning," *Educational horizons*, vol. 81, no. 4, pp. 169–171, 2003.
- [14] S. R. Ross, M. K. Rausch, and K. E. Canada, "Competition and cooperation in the five-factor model: Individual differences in achievement orientation," *The Journal of Psychology*, vol. 137, no. 4, pp. 323–337, 2003.
- [15] M. Suwarsih, *Teori dan Praktek Penelitian Kelas (Action Research)*. Bandung, 2011.