



Student Character in the Use of Learning Technology

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

Purpose: The purpose of this study is to reveal the character of students in the use of learning technology.

Study Design: The research design used a qualitative approach.

Place and Time of Research: SMKN 1 Kebumen Regency, Indonesia from May to June 2023.

Methodology: Qualitative approach, data sources include some students in grades X, XI, and XII, several teachers, including guidance and counseling teachers, and 1 vice principal for student affairs. Data analysis was carried out interactively, from data collection, data reduction, data presentation, to conclusions.

Results: The study show that in general the character of students is well maintained while using technology in learning activities. Even though there are small cases, students can still maintain moral values, moral feelings, and moral actions, as expected by the family and community environment.

Keywords: *Students character; learning technology; moral knowledge; moral feelings; moral actions.*

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1. INTRODUCTION

Technology in the world of education is developing very rapidly, especially educators (teachers) have collaborated with the internet in teaching and learning activities. The internet as a form of technology has been able to facilitate and provide many useful sources of knowledge for teachers and students. Teachers are increasingly assisted in doing various things in teaching and learning activities, such as finding teaching materials, delivering teaching materials, and processing student data. Meanwhile for students, the internet provides many learning resources outside the scope of the school and enriches their insights about things that the teacher might not have conveyed in the classroom. Technological developments must be aligned with the character of students in Indonesia, because Indonesia is a country that upholds national character, courtesy and friendliness. Character can be interpreted as a fundamental value that builds the personality of each individual that is formed due to genetic and environmental influences, which then appear in the behavior and behavior of every human being's daily life [1].

The rapid development of technology can have a positive impact on the world of education, especially in the use of the internet as a support for teaching and learning activities, as well as a technology product. However, on the other hand, technology can also damage character, and can even lead to activities that are not conducive, such as arrogance, spreading fake news or hoaxes, repressive verbal actions, and various deviant behaviors that ignore norms that have been upheld by society. The internet seems to be a double-edged sword for human life. Humans are only required, not led. This of course can lead to misunderstandings, especially in the educational process which requires students to be able to live side by side with technology but also must be able to guide students to place themselves and have self-control which involves parenting and assistance from parents [2].

Besides having a positive impact on the development of science, the internet also often has a negative impact [3-6], especially on morality and the decline in the habits of reading books among students[7,8]. User-friendly access to information encourages people to

look for information on the internet and no longer look for accurate information through printed books. Literacy in library books has decreased [9] because sources of information can be obtained directly from the internet. Sources of information have changed from printed books to the internet. In modern publishing, most authors prefer to use information sources on the Internet. The ease in finding sources of information and compiling information from the internet into reading material causes a decrease in people's reading ability, as well as a decrease in the quality of their reading [10,11]. People often swallow information obtained through social media without evaluating the accuracy of the information they read (Syukur, 2017).

Along with the development of technology, students in schools cannot be separated from the impact that can affect character formation. Therefore, there is a need for synergy between teachers, especially the role of guidance and counseling teachers [12], and students to create a sense of trust and form a conducive learning environment. This study aims to uncover phenomena and understand the character components that students must have in optimizing the use of technology in learning activities at school.

2. METHODOLOGY

This research was conducted at SMKN.1 Kebumen which is a qualitative research with the aim of understanding the phenomena experienced by research subjects, such as behavior, expressions, and language descriptions in related contexts. The research was conducted on target actors as the main data source who may experience various problems. Respondents are social groups that interact with each other individually or in groups. Sources of this data include students, teacher representatives, including guidance and counseling teachers, as well as 1 vice principal for student affairs. They were chosen because of their activities which have been involved in the field of moral development and their habit of applying technology in learning. Through mixed model interviews, semi-structured, the collected data is selected and validated interactively, continuously by confirming directly to other respondents in stages. General conclusions are drawn after each theme is collected.

3. RESULTS AND DISCUSSION

This study reveals various aspects related to students' perceptions and behavior while using technology in their learning activities, including moral knowledge, moral feelings, and moral actions. This phenomenon is very important as study material for efforts to improve school strategies and policies, so that through the right policies it can help create a healthy and conducive learning environment. The results of interviews with each respondent indicated that there were still some deviant actions, but in general the students' character in using learning technology was still quite good. When respondents were asked about the extent of the role of technology in replacing the teacher's role, in general they answered that the teacher's role could not be replaced, because the teacher's role was not only to teach or provide insight but also to shape the character of students. If technology is replaced, technology can only convey learning material, but cannot shape character. In general, the results of interviews with several respondents can be summarized as shown in the Table 1.

Based on the results of the interviews, it appears that in general students already understand the importance of technology for learning activities. They also realize that the use of technology must be done wisely [13,14]. It is realized that the benefits of technology really depend on the purpose for which it is used [15,16, 17]. Because the consequences can be positive or negative, depending on its utilization. The results of the interviews generally concluded that students' knowledge was quite good, they realized that learning technology could not meet all needs in education. There is a need for soul and enthusiasm that needs to be built through direct relationships with teachers, because the spirit of education and character values will be more effective when there is communication through a human approach [18,19]. Student independence is also seen when the teacher gives assignments, through the use of technology students are always focused on completing their assignments.

Overall students have been able to place themselves in the process of learning activities

through the use of technology. They already have a positive perspective, especially regarding interactions with teachers in the classroom so as to create a conducive teaching and learning atmosphere.

Based on information obtained from students and class teachers, overall students still have good moral feelings, they fulfill the 6 components of moral intensity, namely; listen with conscience, dignity, empathy, love of good things, self-control and humility [20,21]. Students also retain awareness that arises through sensory stimulation and directly triggers reflexes. This awareness is often interpreted as something that causes regret when someone commits an act that is contrary to moral values, and is seen as contrary to family, social and cultural moral thinking [22].

This is certainly something positive for teaching and learning activities because it provides supporting factors that make it easier, or mutually beneficial between students and other students, even between students and teachers.

Based on the results of interviews regarding students' moral actions, it was revealed that there were still violations in the use of technology, each of which was evidenced by documentation of student counseling notes and documentation of notes leaving class time [23-27]. This violation is a very small number when compared to the number of students. Students are quite good at carrying out social activities which are always carried out with the presence of other students even though these activities take place at the same time. The students voluntarily want to be involved in social activities as a form of interpretation of the ongoing reality, in this case regarding teaching and learning activities using technology [28-33].

It seems observed that the behavior of students so far is still in the corridor of moral values. There is one important note that needs to be underlined, that there is togetherness among them in learning, this is an important factor where they can solve all problems in learning activities through an open attitude in togetherness [34-36].

Tabel 1. Student moral knowledge

Respondents	Question	Respondents
LFN, TB, DS (Students)	Can technology replace the teacher's role in the classroom ?	I don't think it can because the teacher's role is not only to learn or provide insight but also to shape the character of students. If technology is replaced, technology can only convey matter to us, but we don't gain spirit, we don't gain soul, technology can't form character for ourselves.
UP, SA, BA (Students) With a slightly different answer		Heemmh... I don't think so, because no matter how sophisticated the technology is, it's impossible to complete without guidance and explanation from the teacher, because if we only use technology, there's no psychological connection, I think it's like that, right? clearer, right? until students really understand and understand. When we use technology, students often just want to find the right answer, and don't want to find a way for that to happen, they seem to be less appreciative of the process, that's how it is.
SK, GA (Class X teacher)	How do students behave when they first know material or information from technology before you convey it in the classroom ?	Actually there are not too many children who are blind to the use of learning technology here, at most in one class there are only one or two children who feel inferior in the field of learning technology, only a small number of them feel less courageous, not confident. Most of the students are proficient in mastering learning technology, this sometimes raises condescension towards some friends who are less able to use technology.
EW, PD (Class XI teacher) With a slightly different answer		Thank God, so far their attitude has been good, they are conducive, they respect each other, including respecting me as a teacher. Technology in education they regard as a necessity. Now we are implementing an independent curriculum which is actually the ultimate goal of this learning system is to create a good character called the Pancasila student profile. So allhamdulillah they are still in the frame of forming good morals, this is more important than just mastering the subject matter. I like it when they are smarter or more sophisticated than me in terms of subject matter, it doesn't matter and I observe they still have a great attitude. I often give assignments to find information or teaching materials through Google, my position is still outside the classroom, it turns out they still respect me, they stay focused and don't create a commotion in class. After they search for information, of course I will explain it. So what needs to be underlined is that this fact shows that they are serious about learning.
YTP, SP (Class XII teacher) With a slightly different answer		

Tabel 2. Student moral feelings

Respondents	Question	Respondents
TN, WK, (Students)	How do you feel when you are one step ahead of your classmates in gaining knowledge/ information through technology?	The first, for example, if I am more capable, I will be happy, and it turns out that I am more advanced than my friends. Maybe they have also realized that my intentions and efforts have exceeded theirs, and my view of them must also remain wise. I have to stay humble to be able to teach my friends.
AN, KP (Students) With a slightly different answer	How do students feel about classmates who use technology a little later than themselves?	It's only natural that I invite other friends whose abilities are below mine to study together, I still hope that my abilities don't make us distanced from them, so we still learn together and succeed together too.
YTP, SP (Class XII teacher)		Some of them prefer to share subject matter..., yes they tend to share, because even though they have made a group, they still ask other friends. They tend to share with friends who have not received this information.
EW, PD. (Class XI teacher) With a slightly different answer		Yes, allhamdulillah, one of the characters that we build here is the spirit of mutual cooperation, they must realize that. So those who already know, can do it, hopefully we can work together to pass on their knowledge to those who can't yet. Working together and collaborating is very important, especially in Vocational Schools that are used to it. Togetherness needs to be continued to be forged to avoid the emergence of arrogant traits because they are already smart or already know the information beforehand. Togetherness is an opportunity for them to share knowledge, or share something they are used to doing with their friends, and that really helps me.

Table 3. Student moral actions

Respondents	Question	Respondents
HR, VA (Students)	How to react to your friend who is a little behind in receiving subject matter even though he has tried to gain knowledge through technology?	If there are friends who are not good at technology, I will try to help as much as I can.
LF, TR (Students) With a slightly different answer		I usually directly ask what the problem is. Indeed there are also those who because their families are less well off, or maybe the environment is not supportive..., so my attitude is to invite and study together, that's all.
UP, SB (Students) With a slightly different answer		As for my attitude, I invite friends, usually those who can't do it because the family is not adequate and maybe the environment is not enough, so my attitude is to invite and study together with them.
		My attitude is yes, if I know better than them, I'm happy sis, I'll teach them until they can understand technology.
	Is there a coaching program for students related to student character in using technology for teaching and learning activities?	Thank God, most of the students at SMK N 1 Kebumen are already using gadgets, so to accompany children while using these gadgets for positive activities, the school often conducts moral coaching by integrating supervisory activities into students' daily activities, including through quarterly routine activities that include students' parents. and teachers, not long ago the school collaborated with the police, incidentally the police had an activity to educate about the use of gadgets. So, thank God, children have been conditioned to use gadgets properly and correctly.
SM (Vice Principal for Student Affairs)	How to solve the problem of students who misuse technology?	Yes, later if students detect negative behavior at school, usually the homeroom teacher will report it first. But before that, usually the homeroom teacher would first talk to the student concerned, then the guidance and counseling teacher would follow up by calling the student concerned.
SF (Counseling Guidance Teacher)	Are there reports of student activities or actions that misuse technology in teaching and learning activities?	One of the violations that students have committed is playing gadgets during class, they document a student's violation via video, so not just photos but through videos... that's what happened, they are proud to make negative content. Then there's something they share on their account, either via IG or FB, that they didn't think before that their account is also connected to the teacher's account, so their posts are automatically recognized quickly. For students who have problems, we deal with them first, we call the students, we talk and discuss, but not like interrogating, but we approach it more to the heart, so that children feel protected and they also want to speak honestly. After that, we monitor their progress both at school and outside of school. If they are still acting negatively and there is no change, then we call the parents. We want to know what kind of background and attention his parents have, maybe he lacks affection, maybe he doesn't live with his parents, or maybe he lives in a bad environment that influences his behavior. If the behavior is still not good, then we make home visits..., but often we don't get to this stage, usually when we call their parents, they have changed.

4. CONCLUSION

So far, schools have students who have fairly good character and fulfill the 3 components of character, namely moral knowledge, moral feelings, and moral actions in the use of technology for teaching and learning activities, both inside and outside the classroom. These conditions are influenced by supporting factors that provide enthusiasm and positive energy. The main factor is the collaboration between class teachers, especially guidance and counseling teachers, and the deputy head of student affairs who always accompany and provide direction, foster and protect students. Therefore, students have good moral knowledge, moral feelings, and moral actions as expected by their family and community environment. This is also evidenced by the minimal violations that occur in the use of technology, thus indicating that the character of students is ready to coexist with technology in teaching and learning activities. Another important factor is the family attitude built by the school which has succeeded in creating an open school organization in realizing togetherness among students.

CONSENT

Respondent's Written Consent Has Been Collected And Kept By The Author.

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COMPETING INTERESTS

The authors declare that they have no financial, political, or personal relationship interests that could influence the results of this research.

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