Evaluating the E-Learning on Students’ Character: Blended Learning Model as a Strategy to Improve Students’ Character

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Abstract. This study aims to evaluate E-learning towards the achievement of students’ character and determine strategies to build students' character through the use of e-learning. The subjects in this study were 132 students of grade X of the Sragen Vocational School. The data in this study are quantitative data and qualitative data. Quantitative data is obtained from the results of self-assessment questionnaires by students. Qualitative data were obtained based on the results of the interview by students as supporting self-assessment questionnaire result. The self-assessment questionnaire consisted of 6 aspects of character, namely 1) Friendly and Responsibility, 2) Religious and living in harmony, 3) Honesty, 4) Creative and Curiosity, 5) Tolerance, and 6) Discipline. The results showed that the percentages of achievement of the students’ character are; friendly and responsibility (63.2%), religious and living in harmony (73.9%), honesty (64.4%), creative and curiosity (61.6%), tolerance (72.9%), and discipline (68.8%). The data shows that the percentage of student characters was still low. One strategy which can be used to build students' character is through the use of e-learning by applying blended learning models.

1. Introduction
The world of education currently faces a big challenge in educating students to be young people who are able to answer the challenges in front of the masses. It is not enough just to provide provisions for young people with basic academic knowledge and skills, but also the world of education must be able to develop their character. This is evidenced by the existence of theories and research in the field of character education which shows that the character education program has been integrated into the 2013 curriculum. 2013 curriculum emphasizes the need to build national character by integrating character education in improving the knowledge and skills [1]. This makes the evidence that the purpose of education is not only the formation of abilities but also the formation of character in students [2]. Character building consists of responsibility, fairness, and caring [3]. Character building can be integrated into all subjects and the process of teaching and learning [4]. This is a challenge that must be done by the teacher to show how much the effectiveness of the school in building students not only on cognitive knowledge but also the moral and character of students [5]. Therefore, a good teacher is not only able to form cognitive students but also students' character [6].

The character is the values of human behavior that relate to God Almighty, oneself, fellow human beings, environment, and nationality manifested in thoughts, attitudes, feelings, words, and deeds based on the norms of religion, law, manners, culture, customs and ethics [7]. Characters are formed from three types of interrelated parts, namely: moral knowledge, moral feelings, and moral behavior, all of which are factors forming moral maturity [8]. The character was born of honesty and loyalty was attached to moral value. Character education has been conducted on cognitive development [9-11]; virtues of character [12], social learning [13-14]
Character education must also be accompanied by the use of information and technology developments such as the use of e-learning. E-learning is an electronic media learning environment [15]. This e-learning transforms education in the conventional form into digital form, both in content and system [16]. This e-learning is able to overcome problems in the form of delays or even not conveying learning material [17]. In addition, e-learning can cause a person to share information and can access subject matter at any time [18]. This causes the use of e-learning facilities to become increasingly a necessity in the world of education [19]. Therefore, the quality and sustainability of the use of e-learning must always be maintained and improved without putting aside the character formation of students.

However, the current conditions indicate that the use of e-learning has not reviewed the character of students towards the use of e-learning. It supported by previous research that only discuss the effect of e-learning on motivation [15], academic performance [20], high order thinking skill, cognitive density and social presence [21]. These conditions make the basis for conducting e-learning evaluation research on students’ character achievement. The results of the evaluation will be further analyzed to determine the strategy to build students’ character through the use of e-learning.

2. Research Method

The study was conducted at SMK Negeri 1 Mondokan, Sragen Regency with a total sample of 132 class X students who have used e-learning media. The test instrument used in this study is a self-assessment questionnaire and interview. This questionnaire aims to measure the character of students. Character aspects measured in this study are 1) Friendly and Responsibility, 2) Religious and living in harmony, 3) Honesty, 4) Creative and Curiosity, 5) Tolerance and 6) Discipline. The character aspect is measured using 21 indicators by using six-point scale range from very rare (1) to Always (6). Indicators on each aspect of the character can be seen in table 1.

| No | The aspect of Student Character | The indicators of student character for Each Aspect |
|----|---------------------------------|--------------------------------------------------|
| 1  | Friendly and Responsibility      | (1) Acknowledge and honor the success of others  |
|    |                                 | (2) Push myself to make friends with many people |
|    |                                 | (3) Learn to understand and respect others       |
|    |                                 | (4) Make a priority to harmony rather than stimuli differences that can cause hatred |
|    |                                 | (5) Seek to prevent damage to the natural environment around the school and at home |
|    |                                 | (6) Carrying out of duties and obligations       |
| 2  | Religious and living in harmony | (1) Live in harmony with other religion          |
|    |                                 | (2) Appreciate the religious diversity that is different from myself |
|    |                                 | (3) Appreciate the differences in race and ethnicity of others |
| 3  | Honesty                         | (1) Make myself as someone who always trustworthy in word |
|    |                                 | (2) Make myself as someone who always believed in action |
|    |                                 | (3) Make myself as someone who can always be trusted to work |
| 4  | Creative and Curiosity          | (1) Have thinking to generate new ways           |
|    |                                 | (2) Do something to generate new ways            |
|    |                                 | (3) Seek to know more deeply than anything that has been learned, seen, and heard |
|    |                                 | (4) Seek to know more widespread than anything that has been learned, seen, and heard |
| 5  | Tolerance                       | (1) Appreciate differences of opinion of others who are different from themselves |
|    |                                 | (2) Appreciate the attitude of others who are different from themselves |
|    |                                 | (3) Appreciate the actions of others who are different from themselves |
| 6  | Discipline                      | (1) Showed orderly behavior in the various rules and regulations |
|    |                                 | (2) Showed submissive behavior in a variety of rules and regulations |

In table 1 it can be seen that the friendly and responsibility aspect consists of 6 indicators, religious and living in harmony consists of 3 indicators, honesty consists of 3 indicators, creative and curiosity consists of 4 indicators, tolerance consists of 3 indicators, and discipline consists of 2 indicators. The indicators in the six aspects are adopted from the curriculum center of the Indonesian ministry of education [22].
3. Result and Discussion

Student self-assessment questionnaires are distributed through E-learning media. Students' answers to self-assessment questionnaires will be analyzed descriptively to determine the achievement of student character in each aspect, namely 1) Friendly and Responsibility, 2) Religious and living in harmony, 3) Honesty, 4) Creative and Curiosity, 5) Tolerance, and 6) Discipline. The results of the percentage of student character achievement can be seen in Figure 1.

In Figure 1 it can be seen that the percentage of student character achievement in each aspect is below 80%. This shows that the use of e-learning is still not able to build the character of students. This is because the existing e-learning only aims at delivering material to develop students' cognitive abilities and knowledge. This is supported by Munir that the E-learning learning process tends towards training and education that emphasizes aspects of knowledge and lacks attention to the affective aspects[23]. In Figure 1 it can also be seen that the lowest percentage of student achievement is found in the creative aspect and curiosity, which is 61.60%. This is because e-learning is more focused on its technological aspects rather than aspects of education which will lead to a tendency to pay more attention to technical aspects and ignore aspects of education to change students' attitudes such as creativity and curiosity[24]. The low percentage of student character achievement in each aspect needs to be analyzed to determine the percentage of achievement in each student character indicator. The results of the percentage of student achievement on each indicator can be seen in table 2.

| No | The aspect of Student Character | The indicator of student character for Each Aspect | Percentage |
|----|--------------------------------|-----------------------------------------------|------------|
|    | Friendly and Responsibility    | (1) Acknowledge and honor the success of others | 67.0%      |
|    |                                | (2) Push myself to make friends with many people | 54.4%      |
|    |                                | (3) Learn to understand and respect others     | 72.5%      |
|    |                                | (4) Make a priority to harmony rather than stimuli differences that can cause hatred | 71.1%     |
|    |                                | (5) Seek to prevent damage to the natural environment around the school and at home | 69.8%      |
|    |                                | (6) Carrying out of duties and obligations     | 44.3%      |
| 1  | Religious and living in harmony | (1) Live in harmony with other religion         | 68.4%      |
|    |                                | (2) Appreciate the religious diversity that is different from myself | 76.5%      |
|    |                                | (3) Appreciate the differences in race and ethnicity of others | 76.8%    |
| 2  | Honesty                        | (1) Make myself as someone who always trustworthy in word | 65.1%      |
|    |                                | (2) Make myself as someone who always believed in action | 61.3%      |
|    |                                | (3) Make myself as someone who can always be trusted to work | 66.9%      |
| 3  | Creative and Curiosity         | (1) Have thinking to generate new ways         | 64.9%      |
|    |                                | (2) Do something to generate new ways          | 59.1%      |
|    |                                | (3) Seek to know more deeply than anything that has been learned, seen, and heard | 61.5%    |
Table 2 shows that the lowest for the aspect of the responsibility and responsibility of carrying out duties and obligations that is 44.3%. It’s supported by interview some student that e-learning can not increase motivation to carry out each task. This is because e-learning cannot create an environment which would result in increasing the effectiveness of their learning [25]. Lowest percentage for religious aspects and living in harmony is living in harmony with other religions that is 68.4%. It’s supported by interview some student that e-learning has not provided opportunities for students to interact with other students in real terms. This is because e-learning as distance learning makes students physically separated which reduces or eliminates interaction between learners [26]. Lowest percentage for the aspect of honesty is that you always believe in action that is 61.3%. It’s supported by interview some student that E-learning can’t make the interaction between students that causes students to lack confidence in their own actions. Lowest percentage for the creative aspect and do something to generate new ways that are 59.1%. It’s supported by interview some student that E-learning has not integrated between material and problem in daily life that causes students’ creativity to lack in creating new things. Lowest percentage for the aspect of tolerance who are different from themselves that is 71.6%. This is because learning discussion forums through e-learning cannot create a good atmosphere which would result in increasing the effectiveness of their learning [25]. Lowest percentage for the aspect of discipline is showed order behavior in various rules and regulations that is 66.3%. It’s supported by interview some student that e-learning lacks rules and regulations during the learning process through e-learning.

Learning through e-learning in education shows a number of problems in developing students' character. This is because there is no direct interaction and supervision between students and teachers which causes students to do the learning process in an undisciplined manner. One way to combine traditional learning systems that present the presence of teachers in the classroom is the adoption of a new learning model that combines the advantages of traditional teaching and distance learning with the use of technology is a Blended Learning model.

Blended learning is an approach to curriculum design that uses more than one learning modes in a subject [27]. The blended learning model is a model that blends both face to face and online learning modes [28–30]. The application of blended learning is expected students can understand the material better and more actively in learning, so as to improve student learning outcomes. Online learning or e-learning in blended learning becomes a natural extension of traditional classroom learning using face-to-face learning [31]. Blended learning is the most logical and natural evolution of our learning agenda. It suggests an elegant solution to the challenges of tailoring learning and development to the needs of individuals. It is an opportunity to integrate the innovative and technological advances offered by online learning with the interaction and participation offered in the best of traditional learning [32].

Learning with a blended learning model can shift the learning principle from the teacher center towards the student center dynamically. Blended learning is complementary to the lack of face to face learning and e-learning because according to Munir, the weaknesses of e-learning learning are students and teachers physically separated so that face-to-face interaction is reduced [31]. E-learning tends to be training rather than education which leads to cognitive and psychomotor abilities and is less concerned with affective aspects. Learning with face to face learning teachers are able to function themselves as educators and provide motivation directly and expressively to students. Blended learning makes student activities in the classroom more varied. However, the effectiveness of blended learning on many other factors and among them student characteristics, design features and learning outcomes [33–34].
4. Conclusion
Based on the description of the results and discussion above, it can be concluded that the percentage of student achievement is friendly and responsibility (63.2%), religious and living in harmony (73.9%), honesty (64.4%), creative and curious (61.6%), tolerance (72.9%), and discipline (68.8%). The data shows that the percentage of student characters is still low. The results of exploration and literature review found that one strategy to build students’ character through the use of e-learning by applying blended learning models. Blended learning is complementary to lack of face to face learning and e-learning. This causes learning with blended learning to shift the learning principle from the teacher center towards the student center dynamically.

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