# Analysis of Effectiveness Character Value in Blended Learning

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# Analysis of Effectiveness Character

## Value in Blended Learning

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Abstract— Society 5.0 is associated not only with technological advances, but doing system updates in their respective fields. Responden 40 btained were 37 in Universiti Teknologi Petronas (UTP). This study aims to analyze the effectiveness of character value in blended learning. The research model used is a quantitative method with a frequency histogram based on the Likert scale from (1 never to 5 always). This paper describes how to see the connection between one character value indicator and another. This result imply that the character analysis value in blended learning methods in teaching has received positive feedback from students, the average mean (responsibility = 81.08; independently = 85.63; discipline = 74.86; curiosity = 74.32; cooperation = 85.09).

Keywords—Society 5.0, blended learning, character value

### I. INTRODUCTION

In the current global life, we have to maximize the 13-t use of technology and make various innovations from the fourth industrial revolution, such as the Internet of Things (IoT), big data (BD), artificial intelligence (AI) [1]. With the passage of time in the future, life has a new value and brings the same society and the sustainable society is not static. It changes every time. Therefore, this is society 5.0 a super smart society [2]. People on this era are called digital native. Based on fact digital native is young generation who always to do something online. Furthermore in this future, people are not using IoT, BD, AI, but doing system updates in their respective fields. Based on materials from Japan business federation (keidanren), there are require five walls, one of which is human resources [3], It supports education reform. Basically, goals of educational reform are worked more effectively and efficiently to reach the National Education goals. With an information technology knowledge and human resources in digital skills, it can be realized. Further development of digital skills is consequently seen as more practical and measurable results from media, information or digital literacy. Meanwhile, this digital literacy can observe a variety of various skills that can be grouped as digital skills taken from the use of e-learning.

Implementation of learning for the Sustainable Development Goals (SDGs) includes e-learning systems aimed at improving human centered society [3]. E-learning does not only help in the learning process, but the occurrence of more communication channels and flexible time. Now,

people can find information quickly and develop knowledge through e-learning. Combined e-lear 38 g with conventional learning can complement each other in the learning process called blended learning. The use of blended learning in elearning may not only for distance classes, but can develop to a good way for conventional learning [4]. Blended learning is an element that tends to improve quality in the development of education in the modern era which faces to face [5]. Humans are required to continue to deepen knowledge, not only emphasizing the development of intellectual abilities but must be in harmony with things matters relating to attitudes or responses during the learning process and the values applied to real life [6]. Also, it is to be a build a character value. Character values in the sphere of education are how institutions build student character. What is meant by coaching is the same as forming or developing. Concerning educational institutions, it is more about the formation of school culture. One of the school cultures that is determined is a culture of noble character. Then it occurred the term formation of moral values in the school culture.

Blended learning has an interesting 39 e in learning value. By education with blended learning, tople's moral values can be improved, especially students. According to the laws of Republic of Indonesia No. 2 at 1989, article 4 "Pendidikan Nasional bertujuan mencerdaskan kehidupan bangsa dan mengembangkan manusia Indonesia seutuhnya, yaitu manusia yang beriman dan bertaqwa terhadap Tuhan Yang Maha Esa dan berbudi pekerti luhur, memiliki pengetahuan dan keterampilan, kepribadian yang mantap dan mandiri, serta tanggungjawab kemasyarakatan dan kebangsaan". From that article, it can be known that the national education is arranged to create human resources who are smart, skilled, have a good character, independent, religious, responsible to the environment and to the nation [7]. This way, education and learning of moral values is a must to create human resources with character. The use of blended learning is in line as educational goals which the learning value can be appear from the beginning of the learning process, to learning evaluation. It can be appears when learning activities began until the end.

Based on the explanation above, this article focuses on seeing how much effectiveness the character value can get on the blended learning class. Therefore moral values or



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character values are important for education and the impact that will occur when students do activity at the classroom.

### II. LITERATUR REVIEW

### A. Blended Learning

Blended learning is a term blending between conventional learning models which are generally carried out directly with an internet-based teaching model known as e-learning. [8]. Haed on these statements, the researcher can conclude that blended learning is a combination of face-to-face learning and learning through the internet, [28] learning supported by other technologies, that aims to create an attractive and effective learning environment. According to (Hofmann 2014), users can get results using technology and it can be ascertained the commitment of the participants, by paying attention to the characteristics of students and encounters with technology [9]. Coccoli et., al. (2014) explained that the knowledge of technology alone is not only capable of succeeding in learning [10]. Between Hofmann and Coccoli, there is a 42 ference of opinion on learning with technology, learners have an important role in terms of friends for learning activi 28, and this is to get the effectiveness of learning on blended learning. The application of blended learning makes the learning process more efficient, more effective, and provides po25ve added value. Blended learning for students can get pedagogical benefits such as increased learning effectiveness, enjoyment, and efficiency (Garrison & Kanuka, 2004; Graham, 2013) [11]. The application of blended learning in education is very necessary for the current conditions. In addition to increasing effectiveness, learning occurs independently or in groups and conventionally, both of which have complementary advantages. Therefore blended learning can also increase accessibility, larners can learn more easily in accessing learning material. Evidence-based practices (Allen et al. 2016; Bernard et., al. 2014; Ginder and Stearns 2014; Means et., al. 2010, 2013; Tamin et., al. 2011) in online learning suggest that the important features for promoting student success is to design courses that enhance student engagement or time on task [12]. This opinion is related to blended learning that is not only combines e-learning with face 110 ace, but can also have the time needed to do the task. The learning process using the blended learning model can provide additional time for students to understand the material. This allows students to repeat the learning material. Online learning causes students to have different learning styles and attitudes (Coccoli., et al 2014) [10], this makes students try to adjust and be able to develop their learning potential so that they can mak 10 he best use of blended learning. Therefore learning by using the blended learning model can prov 20 additional time for students to understand the material. Students can improve their subject matter mastery by repeating the learning material several times, practicing questions both independently and in groups.

### B. Character Value

Values are moral based stages. In everyday life, value is something of quality, having qualities that can actualize within oneself. Character education cant occur in higher education, but in reality it is different when (Dharmawan, 2014) believes that the moral values that have been

inculcated at the previous school level dont cease and character education is ca 45d out continuously in higher education [13]. Hence to strengthen the character that has been obtained at the previous school level, its important to 6 ntinue the formation of characters in higher education. Faiziyah, N. & Fachrurrazy (2012) found that there was character values integrated in lesson plans studied. The lesson plan integrates the values of c 6 fidence, logical thinking, creativity, innovation, open-mindedness, responsibility, politeness, activeness, politeness, respect, discipline, and cooperativeness Other opinions menjelaskan bahwa pendidikan moral 30 miliki enam belas nilai utama, yaitu: kind hearted, polite, respect, love, justice, freedom, courage, physical cleanliness and mental, honesty, crafts, cooperation, simplicity, gratitud 6 rationality and communal work (Chew, 2010) [14]. Character values integrated in the process of teaching and learning are responsibility, independently, respect, politeness, and discipline. The social environment includes the principles of equality, dialogue, freedom, unity and conversation [15]. In this case students as educated human beings set an example for the community to be able to behave properly and as if to shape individual character. Character education and moral education have the same meaning (T. Ramli, 2003)[15], namely social values which have a great influence on society, but if in the context of education refer to values originating from religious and cultural teachings.

Grieshaber and McArdle (2014) Give the opinion that the general approach involves knowledge of ethical or moral behavior [16]. Values of education include ability and moral development. Higher education is associated with quality assurance of ethics and moral values [17], given the development and global challenges it is related to smart society 5.0 that supports education reform, not only technological reform but is closely related to ethics and moral values. From the research above indicates that character value has an impact on learning both now and in the future.

### III. METHOD

This research is used quantitatively descriptive method with frequency histogram. Responses to these questions are based on the Likert scale from (1 never to 5 always). Indicators of character value integration in blended learning were related to five variable (responsibility, independently, discipline, curiosity and cooperation).

### IV. RESULTS AND DISCUSSION

Respondents consisted of 344 tudents from UTP. A summarized demographic profile can be seen in Table I.

TABLE I. DEMOGRAPHIC

	Items	UTP
Gender	Male	17
Gender	Female	21
	Total	38

Table II shows the reliability test for five variables. We can observe the Cronbach's alpha coefficient with a minimum value which is 0.60 [18]. Therefore, five variables

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are considered reliable because the coefficients is more than 0.60.

TABLE I. CRONBACH'S ALPHA COEFFICIENTS

Variables	Cronbach's Alpha
Responsibility	0.776
Independently	0.792
Discipline	0.899
Curiosity	0.802
Cooperation	0.771

This result imply that the character analysis value in blended learning methods in teaching has received positive feedback from students and the overall results are given in figure 1. The average mean (responsibility = 83.42; independently = 88.26; discipline = 77.02; curiosity = 76.57; cooperation = 87.72)

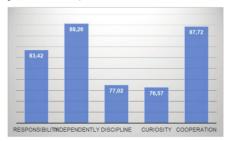


Figure 1. mean score for five indicators

Figure 1 shows that the average score of character value on blended learning has been effectively integrated in the independent for students section, work on individual assignments, work on assignments by not following others, read the material first before going online classes, make a summary after reading, make learning plans only when asked, plan and make their own decisions in matters of leaning, doing assignments assisted by others. In the cooperation section, it has a value with results with a high enough level of effectiveness, so that this indicator can be integrated with character value in blended learning. The parts of which has a good cooperative attitude towards group discussion are felling happy and helping each other when given the task, being attentive about solving group task problems, also helping to complete tasks when having difficulties, respect with groups, appreciate the work of group members, and help others in a group that is having difficulties.

In the discipline and curiosity section, the score is not good because students are more concerned with the knowledge gained and prefer to work with friends so that their curiosity becomes high when discussing and they ask other people when having difficulty understanding learning.

The hypothesis has two possibilities. Therefore, research is needed, before the hypothesis is accepted or rejected. With the steps and procedures called hypothesis testing. The hypothesis proposed in this study are as follows (Table III):

 $H_0$ : there is no effect of the effectiveness of character values in blended learning

*H*<sub>1</sub>: There is an effect of the effectiveness of character values on blended learning

Based on the results of the hypothesis test above, it shows that there is an effect between the two samples. Therefore can be seen the effectiveness of character values in blended learning and can be applied properly.

TABLE III. RESULT ON THE FACTORS

	α	p-value	decision
Responsibility	0,05	.067	Do not reject $H_0$
Independently	0,05	.043	Do not reject $H_0$
Discipline	0,05	.074	Do not reject $H_0$
Curiosity	0,05	.286	Do not reject Ho
Cooperation	0,05	.017	Do not reject $H_t$

### CONCLUSION

The conclusions from the research results cover three indicators have effectively integrated character values in blended learning in UTP. Two other indicators are less effective integrated character value in blended learning. We expected that with this research students are more active in the learning process and make learning fun.

### REFERENCES

- Y. Aoki, K. Nakamura, and Y. Yuminaka, "Science 31 ucation for Society 5.0," vol. 2019, no. Ictss, pp. 6–8, 2019, [Online].
   Available:
  - http://www.mext.go.jp/a\_menu/shotou/zyouhou/detail/1375607.htm.
- [2] O. 2017. Y. Adam. P, A. Akhmad. A., "Group Management System Design for Supporting Society 5.0 in Smart Society Platform," [CTSI, pp. 398-404, "08267977."
- M. Fukuyama, "Society 5.0: Aiming for a New Human-centered Society," *Japan SPOTLIGHT*, vol. 27, no. August, pp. 47–50, 2018, [Online]. Available;
  - $\label{limit} $$ http://www8.cao.go.jp/cstp/%0Ahttp://search.ebscohost.com/login.as px?direct=tnue&db=bth&AN=108487927&site=ehost-live.$
- [4] A. Kristanto, M. Mustaji, and A. Mariono, "The Development of Instructional Materials E-Learning Based On Blended Learning," *Int. Educ. Stud.*, vol. 10, no. 7, p. 10, 2017, doi: 5539/ies.v10n7p10.
- K. L. Dangwal, "Blended Learning: An Innovative Approach," vol. 120. 1, pp. 129–136, 2017, doi: 10.13189/ujer.2017.050116.
- [6] A. MARINI, "Character Building Through Teaching Learning Process: Lesson in Indonesia," *PONTE Int. Sci. Res. J.*, vol. 73, no. 4, 2017, doi: 10.21506/j.ponte.2017.5.43.
- [7] N. Sari, "The Importance of Teaching Moral values to The 24 ents," J. English Educ., vol. 1, no. 1, pp. 154–162, 2013, [Online]. Available:
  - http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1020.9006 p==rep1&type=pdf.
- [8] A. Purnomo, N. Ratnawati, and N. F. Aristin, "Pengembangan Pembelajaran Blended Learning Pada Generasi Z," J. Teor. dan Praksis Pembelajaran IPS, vol. 1, no. 1, pp. 70–76, 2016, doi: 17977/um022v1i12016p070.
- M. J. Kintu, C. Zhu, and E. Kagambe, "Blended learning effectiveness: the relationship between student characteristics, design

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- features and outcomes," Int. J. Educ. Technol. High. Educ., vol. 14, no. 1, 2017, doi: 10.1186/s41239-017-0043-4.
- [10] C. M. Tang and L. Y. Chaw, "Digital literacy and effective learning in a blended learning environment," *Proc. Eur. Conf. e-Learning*, ECCL, vol. 14, no. 1, pp. 601–610, 2015.
- [11] W. W. Porter, C. R. Graham, K. A. Spring, and K. R. Welch, "Blended learning in higher education: Institutional adoption and implementation," *Comput. Educ.*, vol. 75, pp. 185–195, 2014, doi: 1016/j.compedu.2014.02.011.
- [12] P. Bazelais and T. Doleck, "Investigating the impact of blended learning a academic performance in a first semester college physics course," J. Comput Educ., vol. 5, no. 1, pp. 67–94, 2018, doi: 10.1007/s40692-018-0099-8.
- [13] B. Sumintono, L. M. Tahir, M. Anuar, and A. Rahman, "Pendidikan Moral di Malaysia: Tantangan dan Implementasi Pendidikan Karak 47 i Sekolah," *J. Pendidik. Karakter*, vol. 2, no. 1, pp. 14–22, 2012, doi: 10.21831/jpk.v0i1.1308.

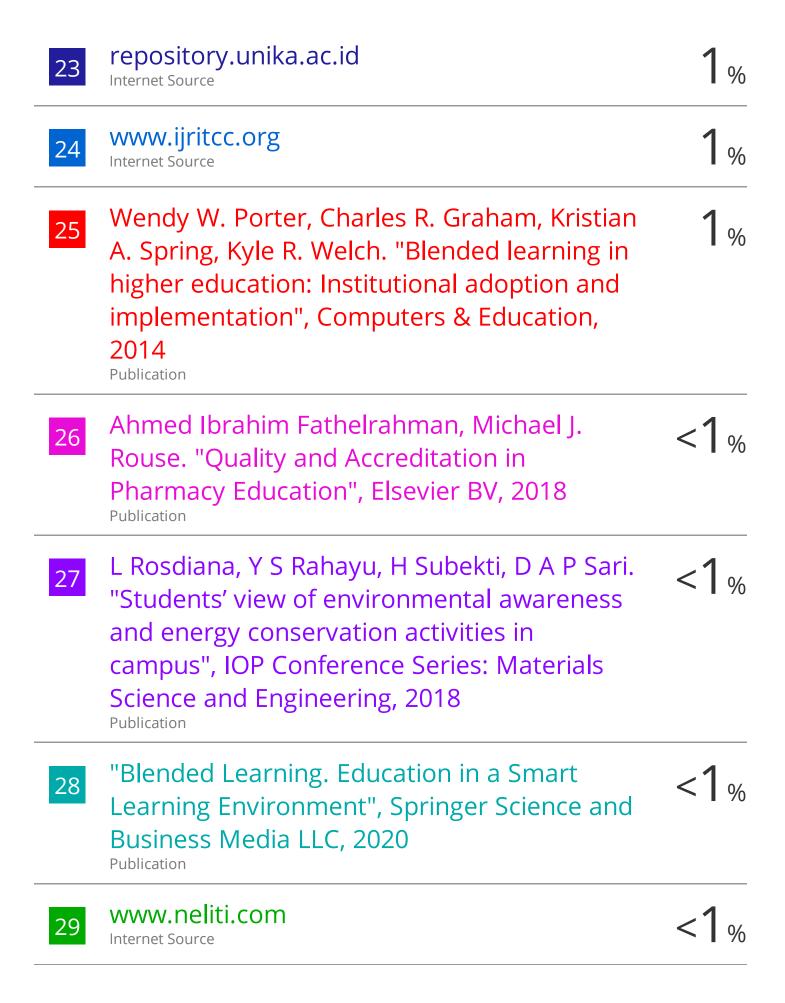
- [14] N. Novianti, "Bildungsroman for Character Education in Higher Education: an Indonesian Context," *Int. J. Educ.*, vol. 9, no. 2, p. 18 2017, doi: 10.17509/ije.v9i2.5474.
- [15] A. N. Khuziakhmetov, G. R. Shafikova, and V. A. Kapranova, "Conditions of educational environment for the develogy of teenagers' moral relations," *Int. J. Environ. Sci. Educ.*, vol. 10, no. 4, pp. 515 13, 2015, doi: 10.12973/ijese.2015.265a.
- [16] J. Lunn Brownlee, L. Scholes, S. Walker, and E. Johansson, "Critical values education in the early years: Alignment of teachers' personal epistemolo 34 and practices for active citizenship," *Teach. Teach.* 52, e., vol. 59, pp. 261–273, 2016, doi: 10.1016/j.tate.2016.06.009.
- [17] A. Prisacariu and M. Shah, "Defi 19 the quality of higher education around ethics and moral values," Qual. High. Educ., vol. 22, no. 2, pp. 152–166, 2016, doi:10.1080/13538322.2016.1201931.
- [18] roberbt A. Petreson, "A Meta-analysis of Cronbach's Coefficient Alpha," J. Consum. Res., vol. 21, no. September, pp. 381–391, 1994.

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