

Implementing Character Education through Information Technology: A Case Study on Mapag Buana Based on Local Wisdom

Sri Suhartini¹, Martiningsih²

^{1,2} STT Wastukencana Purwakarta West Java
Email: sri[at]wastukencana.ac.id

Abstract: *Character education based on local wisdom is an effort to answer the challenges of an increasingly complex era that is influenced by the rapid development of information technology. This study aims to describe the use of technology in character education based on local wisdom in Purwakarta, with the formulation of the problem of how to use information technology in character education for students based on local wisdom in Purwakarta, especially on Tuesday's theme, "mapag buana". The research was conducted using a case study method with a qualitative approach. Data collection techniques using observation, interviews and document studies. The results of the study show that character education in Purwakarta produces student identities with the character of Sundanese local wisdom but with a global perspective.*

Keywords: information technology, character education, local wisdom

1. Introduction

The recent phenomenon shows several indications of moral degradation, especially among students. The rise of delinquency events committed by students such as bullying, cheating, smoking, promiscuity, student brawls, drugs had even led to criminal acts that claimed victims. This is caused by internal and external influences where the students grow and develop. In addition, the rapid development of information technology has a big impact on the character of students, on the one hand there is a positive impact but on the other hand there is also a negative impact. Research conducted by Hasibuan found that deviant behavior in students is already at a very alarming and disturbing level and can even change students' personalities and identities [1].

Schools are important institutions that play a role in shaping and strengthening the character of students so that they become good and in accordance with the values prevailing in Indonesia. On the other hand, education in Indonesia is still facing various problems in building student character. The process and results of education still focus on cognitive problems, while the affective aspects have not been developed optimally, so that character education is a necessity to be developed in schools [2]. Furthermore [3] and [4] mentioned the importance of developing textbooks based on local wisdom to strengthen student character, especially for elementary schools.

To answer the challenge of building student character, in West Java, especially in Purwakarta Regency, a character education program based on local wisdom has been implemented. Local wisdom has an important role in character education in schools [5]. For the Purwakarta district, the character education that is applied is Sundanese local wisdom as outlined in Regent Regulation No. 69 of 2015 with the "7 Poe atika Istimewa" program. To realize the success of student character building, government

intervention is needed in determining character education policies in accordance with the local wisdom values of each region [6].

This research is studied using social construction theory from Peter L Berger and Thomas Luckman with three inseparable dialectic dimensions, namely externalization, objectivation and internalization [7]. This theory looks at the dialectical process in the implementation of character education for students in Purwakarta based on local wisdom with seven educational themes known as the 7 special Poe atika. The next concept used in this research is character education. Suyanto (2010) said that character education is character education plus, which involves aspects of knowledge (cognitive), feelings (feeling), and action (action). The next concept is local wisdom. Robert Sibarani (2014) says that local wisdom is genuine knowledge or local intelligence of a society that comes from the noble values of cultural traditions to regulate the order of life. In addition, the concept of information technology is also used to examine the use of information technology in character education. According to Ward, J., Peppard (2002), information technology refers to specifications regarding technology, especially hardware, software and telecommunication networks that facilitate and support the process of collecting, processing, storing, dissemination and exchange of information. Meanwhile O'Brien (2005) argues that information technology includes the main concepts, development and various information technology management issues, namely hardware, software, network, data management and many Internet-based technologies

This study aims to analyze how to use information technology in character education for students based on local wisdom in Purwakarta, namely mapag buana. The results of this study can be used for stakeholder consideration in the development of information technology in supporting character education, so that it will be able to realize the

character of students who still have local wisdom values and at the same time have a global outlook.

Several studies have been conducted related to character education based on local wisdom, namely research conducted by [12], which examines the role of carpon in pipir canopy in strengthening student character: (Rahmatih et al., 2020) which analyzes reflections on local wisdom in science learning; [13] which discusses local wisdom-based contextual learning models; (Wunangun, 2020) which discusses strengthening character through literacy in schools based on local wisdom; [14] which discusses the role of local wisdom values in character education; [6] which discusses character education based on character education 7 special points). Meanwhile, the difference between this research and previous research is that this research focuses on the use of information technology in character education based on local wisdom, on "mapag buana" character education.

2. Method

The research method used is a case study with a qualitative approach. The case study method was chosen because this Mapag Buana education program only exists in the Purwakarta area and is unique because it combines the concept of social construction with character education based on local wisdom. For this reason, the author sees an interesting phenomenon carried out by one area that is concerned with character building, namely Purwakarta district. The interesting thing that was done by the Purwakarta district government in an effort to implement character education was legalized in the Regent Regulation No. 69 of 2015 concerning character education that is based on local wisdom.

The subjects of this study were elementary school students, teachers, school principals, heads of the Purwakarta district education office, parents, and community leaders. Meanwhile, the object of this research is the use of technology in character education for students based on Mapag Buana local wisdom. Sources of data come from interviews with informants, results from direct observations in the field and from documentation studies. The research location was at Ciwangi Elementary School in Purwakarta Regency, based on the consideration that the school was a reference school in implementing the 7 Poe Atika Istimewa character education program. The research schedule is carried out with the stages of research preparation, data collection, data reduction and writing of research results, up to the publication stage.

3. Research Results

SDN Ciwangi was established in 1967, is about nine kilometers from the city center and has a strategic position because it is located on the side of the main road and is surrounded by residential areas so it is easy to reach. Ciwangi Public Elementary School has a number of potentials and supporting resources that make it possible to be empowered in order to improve the quality of education. Efforts to impro

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kilometers from the city center and has a strategic position because it is located on the side of the main road and is surrounded by residential areas so it is easy to reach. Ciwangi Public Elementary School has a number of potentials and supporting resources that make it possible to be empowered in order to improve the quality of education. Efforts to improve the quality of education include improving transparent, accountable and participatory management. In line with the spirit of regional autonomy and decentralization of the implementation of school education, they are given the freedom to develop their potential and characteristics according to the interests and demands of society. With various improvement efforts made, this Ciwangi Elementary School has become one of the pilot and reference schools for implementing character education nationally, and especially in Purwakarta district. The quality of education included improving transparent, accountable and participatory management. In line with the spirit of regional autonomy and decentralization of the implementation of school education, they are given the freedom to develop their potential and characteristics according to the interests and demands of society. With various improvement efforts made, this Ciwangi Elementary School has become one of the pilot and reference schools for implementing character education nationally, and especially in Purwakarta district.

The social construction of the character of Purwakarta students through character education at Ciwangi Elementary School, Purwakarta Regency begins with the phenomenon that occurs in student behavior that is considered deviant, which is then carried out by social construction of the behavior so that it does not deviate through character education. Simultaneous dialectical processes in externalization, objectivation and internalization are used to explain the social construction of student behavior through character education 7 Poe Atikan Istimewa. Understanding the social construction of student behavior in Purwakarta starts with the implementation of the 7 Poe Atika Istimewa character education program in accordance with Regent Regulation No. 69 of 2015 concerning character education which starts through pilot model schools, then is gradually implemented in all elementary education level schools in Purwakarta Regency. Character educCharacter education in Purwakarta is poured into themes every day, but remains integrated. This means that every day, there is an emphasis on certain themes but still doing another learning in a holistic manner. The concept of character education "7 Poe Atikan Special" is poured into the following themes:

- 1) Monday (AjMonday (Ajeg Nusantara). Ajeg in Indonesian means upright and the archipelago is a stretch of territory from Sabang to Merauke. Learning on Monday aims to foster a sense of nationalism in students. Students are taught to get to know the culture, customs, natural wealth of the archipelago, all of which are inserted into the learning curriculum in Indonesian.
- 2) Tuesday (Mapag Buana). Mapag means to pick up and Buana means the world, so literally it means preparing students to pick up the arrival of an increasingly modern world civilization. In this theme, students are accustomed to being literate in technology. Learning is carried out by introducing foreign cultures around the world, using information technology devices and sources from the

internet. For this Tuesday, students are also accustomed to using international languages.

- 3) Wednesday (Maneuh in Sundanese). Maneuh means stay or stayed, and Sundanese is a culture that inhabits the land of Padjadjaran. On this theme, students are accustomed to recognizing and preserving Sundanese cultural values in everyday life. Starting from how to dress, the language used and the games played. This is the goal so that students maintain their identity as Sundanese people and live with Sundanese values in the midst of today's progress.
- 4) Thursday (Nyanding wawangi). Learning on Thursday is intended to develop students' creativity, especially outside of academics. They are freed not to wear school uniforms, may bring musical instruments or anything according to positive hobbies. They are given a place to express themselves according to their talents and interests.
- 5) Friday (Nyucikeun self). Nyucikeun self means bringing oneself to holiness. The values developed on this Friday are spiritual and religious values. Students are given space to implement a vertical relationship with God according to their respective religions and beliefs.
- 6) Saturday-Sunday (Be at home at Imah). Betah at Imah teaches students to always love their family and feel comfortable at home as the first place for them to study and socialize.

This study focuses on analyzing one theme out of 7 special poems, namely the Mapag Buana theme. As already explained, mapag world means how these students pick up world civilization. This is inseparable from the use of information technology during learning. At Ciwangi Elementary School, learning on Tuesday uses technological media in learning. The school provides learning facilities using laptops and infocus which are equipped with an internet network. The use of information technology in learning at Ciwangi Elementary School has become a necessity and can be seen from the learning atmosphere at school. In addition to the facilities and infrastructure provided by the school, students who have laptop facilities are also allowed to bring them to school.



Figure 1: Learning activities in class

Learning with information technology has also increased during the COVID -19 pandemic situation. The learning system which was initially carried out face-to-face then changed to virtual face-to-face It is undeniable that the use of information technology in education. The online learning methods used are zoom meetings, Google meetings, Google classroom and learning videos like YouTube.

This increasingly makes all stakeholders, and students adapt to this situation. For about two years, all stakeholders and students were forced to increase technology literacy. This situation has forced the government, in this case the education office, schools, teachers, parents and students to take adjustment steps, starting with equipping online learning facilities such as laptops and cellphones as well as Internet networks. Skills in using information technology devices are also increasing. This has a very positive influence on increasing the technology literacy of teachers and students.

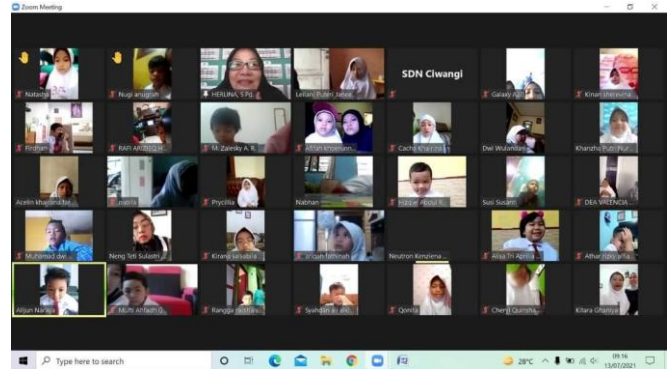


Figure 2: Online learning using a zoom meeting

4. Discussion

Utilization of information technology in the process of social construction Student's character education at SDN Ciwangi begins with an externalization process. In this externalization process, the education office disseminated policies on character education, then all stake holders made adaptations or adjustments to this new rule. Specifically for the implementation related to the Mapag Buana theme, the adaptation made by the school is to provide facilities and infrastructure for information technology-based learning. Computer equipment and Internet network are prepared for the Mapag Buana theme implementation every Tuesday. Apart from the school, parents also support and adapt by providing computer facilities for their children for those who can afford it. This is a form of support from parents to schools due to the limited computers owned by the school. Increasing technological literacy is also carried out for teachers as facilitators for learning with this information technology.

The objective of character education by utilizing this technology is carried out continuously so that students and teachers get used to the new learning system. By using this information technology device, learning is more interesting because there are always new things that can be obtained quickly and accurately through the Internet. This was reinforced by the conditions after the Covid-19 pandemic so that students and teachers were increasingly accustomed to information technology-based learning patterns.

The internalization process can be seen from the students and teachers getting used to the use of information technology in the learning process. Starting from the search for learning materials, learning assignments to evaluating learning using technology. What's interesting about these students is that they understand and apply local values in their daily lives,

but they are technologically literate and have a global outlook. This is because on Tuesday with the theme mapag global, they are taught about world cultures and also global issues which open their minds about the modern world. This is very important to prepare these students to face the 21st century which has different challenges than before.

From the character education process that has been carried out by the Ciwangi Elementary School, students understand and apply the values of local wisdom to character education on the Mapag Buana theme while simultaneously applying information technology in everyday life both at school and at home. The Mapag Buana theme of character education forms students with distinctive local wisdom characteristics that also have a global perspective.

The social construction of student behavior through character education in Purwakarta runs systematically according to externalization, objective and internalization schemes. Of the three schemes, there is a character education intervention 7 Poe Atika Istimewa, especially the Mapag Buana theme, which consistently utilizes information technology. The description of the social construction is as follows: in externalization, it can be seen that students make adjustments to the implementation of the mapag buana theme character education in accordance with the rules set by the school, this shows that there is an adaptation of students to the character education program. Then through this character education, habituation is carried out, which is applied through school rules, so that a habituation process occurs in students as a process of adjustment to regulations regarding Mapag Buana character education. Second, in the objectification of its implementation, there are continuous interaction and delivery of mapag buana character education information to school members, the indicators show that students are already aware that the character values built by the mapag buana character education program are good things that continue to be done without being ordered so that it shows that behavior students are institutionalized. Third, the internalization of the implementation remains consistent through the Mapag Buana character education program with the support of the local government, the process of attaching and institutionalizing the character values as a whole and even integrating into the students, because the character education applied is based on local wisdom and technology, a capable student identity is formed. technology without forgetting the noble values of Sundanese culture.

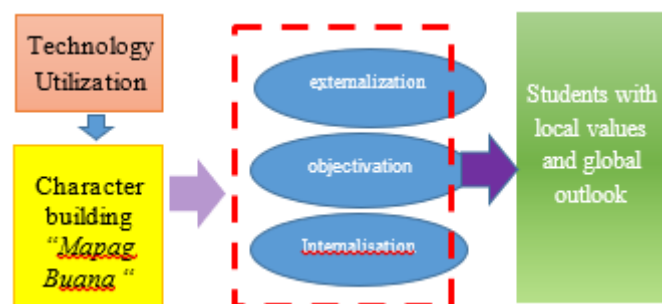


Figure 3: Model of using information technology in character education based on local wisdom

From the results of the discussion, the authors found that there is an intervention component through the use of information technology in mapag buana character education in social construction in order to produce character students who have global insight based on local culture, as listed in the following figure:

5. Conclusion

The conclusion of this study is that the process of character construction of students in Purwakarta through character education based on local wisdom by utilizing information technology has been successfully carried out. This success is due to intervention from the government which makes policies and then implemented properly in schools by providing facilities and infrastructure for learning, the readiness of teachers who have good technological literacy and also visionary school principals. The success of this program is also inseparable from the support of parents and community support, so that the behavior of Purwakarta students is formed with character while preserving local cultural values but having global insight and good technological literacy.

References

- [1] A. A. Hasibuan, D. Syah, and M. Marzuki, "MANAJEMEN PENDIDIKAN KARAKTER DI SMA," *Tarbawi J. Keilmuan Manaj. Pendidik.*, 2018, doi: 10.32678/tarbawi.v4i02.1230.
- [2] I. Permatasari and K. A. Hakam, "The Development of Character Education Based on Sundanese Local Wisdom," 2018, doi: 10.1088/1755-1315/145/1/012124.
- [3] E. Napitupulu, H. Tambunan, and N. Sebayang, "Development of Textbooks Based on Local Wisdom for Character Building of Elementary Education Students," *Int. J. Adv. Eng. Manag. Sci.*, vol. 7, no. 1, 2021, doi: 10.22161/ijaems.71.5.
- [4] R. A. Resterina, S. Untari, and A. R. Al Atok, "Pengembangan Buku Pengayaan Tema Budaya Lokal Berbasis Penguatan Pendidikan Karakter dan Literasi," *J. Pendidik. Teor. Penelitian, dan Pengemb.*, vol. 5, no. 11, 2021, doi: 10.17977/jptpp.v5i11.14146.
- [5] Sudaryatie Sudaryatie, Wahyu Wibowo Eko Yulianto, Hani Subagio, and Danang Prasetyo, "The Importance of Local Wisdom in Higher Education as a Philosophy of Strengthening the Character of State Defense," *Ideaspublishing*, vol. v. 8, no. n. 3, pp. 707–716, Aug. 2022.
- [6] S. Suhartini, B. Sekarningrum, M. M. Sulaeman, and W. Gunawan, "Social construction of student behavior through character education based on local wisdom," *J. Soc. Stud. Educ. Res.*, vol. 10, no. 3, pp. 276–291, 2019.
- [7] D. W. Light, P. L. Berger, and T. Luckmann, "The Social Construction of Reality: A Treatise in the Sociology of Knowledge," *Sociol. Anal.*, 2007, doi: 10.2307/3710424.
- [8] Suyanto, *Model Pembinaan Pendidikan Karakter Di Lingkungan Sekolah*. 2010.

- [9] Robert Sibarani, *Kearifan Lokal, hakikat, peran dan tradisi lokal*. Jakarta: Asosiasi Tradisi Lisan, 2014.
- [10] J. Ward, J., Peppard, *Strategic Planning For Information Systems*, vol. 3rd ed. 2002.
- [11] J. A. O'Brien, "No Title," *ntroduction to Inf. Syst.*, 2005.
- [12] D. Damayanti and B. Nurgiyantoro, "Carpon: Local Wisdom Integrated with Character Education for Primary Students," 2019, doi: 10.2991/iceri-18.2019.84.
- [13] E. Ramdani, "Model Pembelajaran Kontekstual Berbasis Kearifan Lokal sebagai Penguatan Pendidikan Karakter," *JUPIIS J. Pendidik. ILMU-ILMU Sos.*, 2018, doi: 10.24114/jupiis.v10i1.8264.
- [14] R. Rosmalah, "Penerapan Pendidikan Karakter Berbasis Kearifan Lokal," *JIKAP PGSD J. Ilm. Ilmu Kependidikan*, vol. 5, no. 2, p. 232, 2021, doi: 10.26858/jkp.v5i2.20225.

Author Profile



Sri Suhartini, Graduate of Doctor of Sociology, University of Padjadjaran Indonesia in 2020. Received the S.Sos and M.Si. degrees in Sociology Program University Jenderal Sudirman and Sociology Graduate Studies Program, University of Padjadjaran, respectively. Since 2000, until now, registered as Lecturer at the School of Technology Wastukencana in Purwakarta



Martiningsih, ST. M.Si. completed his studies at Malang Institute of Technology Nasution in 1996 majoring in Texture Engineering and continued at Padjajaran University Bandung majoring in Process Microbiology and earning an M.Sc degree in 2012. During 11 years working at PT. Indorama Synthetics Tbk in the Quality Control Textile section and becoming a lecturer in the Textile Engineering Study Program at STT Wastukencana Purwakarta 20 years running. Academic achievement was named the best graduate and model lecturer in the first year of teaching.