# The Principal's Leadership in Strengthening Character Education in the Digital Literacy Era: A Study at Vocational School

**Dhanu Lukmantoro*, Nunuk Hariyati, Yatim Riyanto, Sri Setyowati**
State University of Surabaya, Surabaya, Indonesia

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**ABSTRACT**

**Objective:** 1) How is the leadership strategy of the Head in strengthening character education in the digital literacy era?; 2) How is the curriculum that contains strengthening character education in the era of digital literacy?; 3) How can the environment of strengthening character education in digital literacy be collaborated/integrated into: curriculum, learning, intra and extra coaching, culture and school environment, so that it becomes an example for school residents?; 4) How are the results and impacts of the implementation of digital literacy era character education. **Method:** This research is exploratory with techniques of (1) in-depth interviews, (2) participant observation, and (3) document studies. This research data validity technique uses four kinds of criteria, namely credibility, transferability, dependability and confirmability criteria. **Results:** The integration of character education within digital literacy at 1 Buduran Vocational School presents a holistic model encompassing curriculum, classroom learning, intra- and extracurricular activities, and school culture. This approach ensures students develop technical skills alongside positive values and ethical behavior in using digital tools. The curriculum emphasizes both technical and ethical aspects of digital literacy. Interactive and collaborative classroom methods, with character values embedded in all subjects, create an environment conducive to character development. **Novelty:** It presents a holistic approach that incorporates character education into all aspects of school life—curriculum, classroom learning, extracurricular activities, and school culture—ensuring pervasive character development. The study highlights the pivotal role of the principal in promoting ethical digital practices, showcasing how effective leadership can reinforce character education in the digital era.

## INTRODUCTION

The importance of character education for students has even become the main spirit in education. So that in learning it is emphasized that strengthening character education can be implemented in each subject. By implementing character education in every line, it is hoped that the character of students can always be controlled by the school. The three components of good character are moral knowing or knowledge of morals, moral feeling or feelings about morals, and moral action or moral actions (Bajovic & Rizzo, 2021; Critcher et al., 2020; Pio & Lengkong, 2020; Susilo et al., 2022; Taja et al., 2021). If students have the three components mentioned earlier, then these students already have good character. Character is a combination consisting of morals, ethics, and morals.

Meanwhile, based on the results of PISA 2018 in, the score obtained by Indonesian students in the field of literacy reached 371 while the average OECD score was 487. This means that the competence of Indonesian students in literacy is still below the average of OECD participants. For this reason, there needs to be a paradigm shift in learning, as stated by Mr. Nadim Makarim, minister of education and culture at the end of 2019. The new paradigm includes in the field of student literacy. The literacy of

students in the pandemic tends to use digital literacy. As stated by Sutrisna, (2020) that during the COVID-19 pandemic, every individual needs to master digital literacy as an effort to create a critical and creative mindset and outlook.

Responding to these negative impacts, it is very important to strengthen character education in digital literacy. Character comes from Greek meaning to mark and focuses on how to apply good values in concrete actions or daily behavior. These good values, for example, can keep themselves from negative words, can restrain emotions, give good comments, and behave politely. The application of strengthening character education can be applied in digital literacy, so the principal's leadership management is urgently needed (Agustini et al., 2020; Banoğlu et al., 2022; Muhammad, 2021; Ritonga, 2022; Tołwińska, 2021). Because the headmaster is the dominant factor in determining the success or failure of the school program, the principal is the key decision-maker. Planning, structuring, assigning, organizing, and controlling is a process carried out by a manager in managing an organization.

Researchers have explored deeply how the principal's leadership in strengthening character education in the era of digital literacy at the head of 1 Buduran Vocational School. Improving character education is certainly an obligation in digital literacy which is full of negative influences, so improving character education to students is very necessary to be instilled. Character education research has indeed been conducted. Henc, the novelty of this research is focused on how the principal's leadership in strengthening character education in the digital literacy era.

Hence, the objectives of this research: 1) How is the Chief's leadership strategy in strengthening digital literacy era character education at 1 Buduran Vocational School?; 2) How is the curriculum that contains strengthening character education in the era of digital literacy at 1 Buduran Vocational School?; 3) How can the environment of strengthening character education in digital literacy be collaborated/integrated into: curriculum, learning, intra and extra coaching, culture and school environment, so that it becomes an example for school residents at 1 Buduran Vocational School?; 4) How are the results and impacts of the implementation of digital literacy era character education at Buduran 1 Vocational High School.

**RESEARCH METHOD**

This research is exploratory, meaning that researchers are exploring the principal's strategy in strengthening character education implemented in digital literacy. Therefore, the study seeks to provide detailed information on the steps in setting goals, and strategies of school principals in strengthening character education in digital literacy. This research involved informants consisting of school principals, vice principals, subject teachers, and education personnel. So the leadership of character education in digital literacy held in schools is carried out thoroughly, naturally, describing and analyzing in the form of a discriptive report (Atmojo et al., 2022; Marmoah & Poerwanti, Suharno, 2022; Munawar et al., 2021; Putra et al., 2023; Sinaga et al., 2023; Trisiana, 2020). This study used analysis techniques: 1) in-depth interviews; 2) participant observation; and 3) document studies likely in Figure 1. This research data validity technique uses four kinds of criteria, namely credibility, transferability, dependability and confirmability (Saphira et al., 2022).

**Figure 1.** Research flowchart.

Data analysis techniques are carried out by conducting systematic searches and arrangements from interview transcripts, field notes, and other materials that have been collected by researchers. Analysis activities are carried out by analyzing data, structuring, dividing data according to categories to make it easier for researchers, making syntheses, searching for patterns, making discoveries on what is meaningful, and what is researched and reported systematically.

## RESULTS AND DISCUSSION
### Results
Strengthening character education has become the responsibility of education units, especially in the digital era which indirectly requires being able to be digital literate wisely. 1 Buduran Vocational School is a school that prioritizes character education in its education system, especially in the current era of digital literacy. Based on the results of an interview conducted with the principal of 1 Buduran Vocational School, stated that the curriculum used by the school today is the Independent Curriculum which in the curriculum structure contains strengthening character education as described by Mrs. Agustina as the principal of 1 Buduran Vocational School, as follows.

> *Our curriculum structure contains strengthening character education. The application of character education in learning is carried out integrated in all subjects, projects to strengthen the profile of Pancasila students and extracurriculars. (W. 1/KS/SKOneB/V/04-03-2022)*

The results of the interview showed that in strengthening character education in the era of digital literacy, schools optimize the implementation of strengthening character education in intracurricular, co-curricular, and extracurricular activities in the curriculum they apply. Strengthening character education in the era of integrated digital literacy, intracurricular activities are applied when students learn subjects in class. So that in delivering learning material, teachers must instill character education in students through the subjects they teach. This is as explained by one of the teachers at 1 Buduran Vocational School as follows.

> *Teachers must also take part in instilling character education in the current era of digital literacy. Like my position is as an informatics teacher. So I have to teach my students to be able to have good digital literacy such as looking for information on trusted sources so as not to be easily consumed by hoax news, training to analyze the information that has been obtained, making solutions from the information obtained, and teaching students to use technology wisely. Now all of that has been stated in the teaching module that has been made. (W.1/GR/SKOneB/V/04-03-2022)*

The teacher's statement shows that teachers have a role in strengthening character education in the era of digital literacy. In the independent curriculum, teachers play a role in training the profile of Pancasila students in the subjects they teach. This is done

by including the dimensions of the profile of Pancasila students to be trained and then derived from learning objectives to be formed in learning activities. Strengthening character education in the era of digital literacy at 1 Buduran Vocational School is also integrated with the Pancasila Student Profile Strengthening Project (P5) As well as integrating in intracurricular activities, integrating in P5 activities is also carried out by including the profiles of Pancasila students who will be trained to be packaged in project activities. Integrating character education through P5 activities and explained in an interview with Waka Curriculum as follows.

*Strengthening character education for digital literacy in the P5 activity where children are given the theme of the project and then they design their own so that they can investigate, execute, solve problems, and make decisions. Now to do that there is the use of digital technology to enrich ideas. (W. 1/WKK/SKOneB/V/04-03-2022)*

The statement of the vice principal for curriculum can be interpreted that in project activities students have used technology wisely in producing products for project activities to strengthen the profile of Pancasila students. Thus, teachers have guided students to utilize digital technology for useful activities in order to produce satisfactory work. Extracurricular activities are also aimed at strengthening character education in the era of digital literacy. In extracurricular activities, instructors and coaches play a role in shaping the character of students in the era of digital literacy, as stated by the vice principal for student affairs as follows.

*Character education in the era of digital literacy is also trained in extracurricular activities. Coaches and instructors exemplify to students to use digital technology as well as possible such as looking for competitions and adding ideas to create a work (W. 1/WKS/SKOneB/V/04-03-2022).*

Based on the results of the interview, it was explained that in strengthening character education in the era of digital literacy in extracurricular activities, students are trained to use digital technology wisely so that it can provide benefits for printing a presration. Thus, it can be said that the extracurricular activities of 1 Buduran Vocational School are oriented towards developing students' talents, interests, and character.

Integration of strengthening character education in the era of digital literacy in learning, project activities to strengthen the profile of Pancasila students, and extracurricular activities guided by the realization of the Pancasila student profile. So that strengthening the character of students in the era of digital literacy aims to shape the personality of students to have attitudes including: 1) faith, fear of God Almighty, and have noble morals, 2) independent, 3) work together, 4) global diversity, 5) critical reasoning, and 6) creative. Based on these guidelines, teachers provide an assessment of the character of students adjusted to the dimensions of the Pancasila student profile.

The implementation of strengthening character education in the digital literacy era at 1 Buduran Vocational School must be well planned. Because a program will be carried out well if it has carried out careful planning. This was conveyed by the principal of 1 Buduran Vocational School, Mrs. Agustina when an interview was held as follows.

*Strengthening character education in the current era of digital literacy must be well planned. For this character education strengthening program, it is already a government*

*program, so there are guidelines in its implementation, just adjusted again to strengthen digital literacy for students. Now all of that is certainly based on the vision and mission that the school has, later how can we represent the vision and mission into a school program. (W. 2/1/KS/SKOneB/V/04-03-2022)*

Based on this statement, it can be interpreted that in planning a school program, the principal is based on a formulated vision and mission so that the program made will be synergistic with the school's vision and mission. As the vision of 1 Buduran Vocational School, namely: to become an educational and training institution that produces graduates who have a Pancasila student profile, and become a center of excellence (Center of Excellence). And for the mission of 1 Buduran Vocational School consists of: 1) Preparing graduates who are ready to work and productive in accordance with the needs of the world of work, based on faith and piety, and mastering science and technology, 2) implementing a school operational curriculum that prioritizes independent learning in students, 3) carrying out vocational education and training that is adaptive, flexible, and pays attention to environmental ethics with a global perspective, 4) Developing the potential of schools with industrial nuances, and entrepreneurship and able to compete at the National and International levels, 5) developing a culture of clean, safe, comfortable, beautiful and conducive environment, 6) involving the world of work as a whole in improving the quality of human resources, infrastructure, curriculum, and absorption of graduates, 7) conducting graduate searches through special job fairs and having a track record of graduate absorption rates in the world of work, 8) manage funds professionally by applying efficient, effective, accountable, and transparent principles in the Financial Management Pattern of Regional Public Service Agencies.

Increasing human resources in terms of teachers in planning character education strengthening programs is also carried out through teacher understanding activities about character education programs in the era of digital literacy. The planning of the character education strengthening program in the era of digital literacy at 1 Buduran Vocational School is carried out by strengthening the reading culture to trace the truth of information on digital platforms so that teachers also play a role in forming healthy digital literacy habits in students through classroom learning. This is reinforced by the statement of the vice principal for curriculum as follows.

*In the preparation of learning tools, teachers must include activities that train students' digital literacy but still refer to the dimensions of the Pancasila student profile in accordance with the independent curriculum. Learning tools that have been made will later be collected in the curriculum waka. (W.2/1/WKK/SKOneB/V/04-03-2022)*

This explained that teachers also participated in planning to strengthen character education in the era of digital literacy in the classroom through the delivery of learning carried out. Teachers must package the learning activities carried out in order to train students' digital literacy skills and instill character education in students in accordance with the dimensions of the Pancasila student profile.

Based on this statement, it was explained that 1 Buduran Vocational School has collaborated with related parties to be able to provide teaching to students both in hard skills and soft skills so that students' skills can be in accordance with the industrial world and have characters that are in accordance with the industry and also in

accordance with the dimensions of the Pancasila student profile. So that 1 Buduran Vocational School has also prepared students to be able to use digital technology wisely.



**Figure 2.** Workshop on curriculum alignment with the industrial world.



**Figure 3.** Fun school movement workshops.

Figure 3 shows that financial resources and the availability of facilities are also important things to be organized so that character education strengthening programs in the era of digital literacy. Budget management is important because as a determinant of the program can be implemented or not. In implementing the character education strengthening program in the digital literacy era, 1 Buduran Vocational School uses Educational Unit Operational Assistance funds programmed by the School Budget Plan. This is in accordance with the statement of the head of the administration office as follows.

> *The budget for the character education strengthening program in the era of digital literacy is not specifically written. So every year when planning the annual program, there will also be formulated a budget for one year so that the budget for the character education strengthening program has been included in it. (W.2/2/KTU/SKOneB/V/04-03-2022)*

Based on this statement, it can be interpreted that the budget for strengthening character education in the era of digital literacy of 1 Buduran Vocational School has been integrated in the annual budget of school programs for a year. In addition to the budget, facilities at 1 Buduran Vocational School have also been prepared for the implementation of character education strengthening programs. As stated by the vice principal for facilities and infrastructure as follows.

> *To support the strengthening of character education from the sarpras team, ensuring the availability of a crowded internet, and a modern digital learning space. We ensure that the internet in schools is accessible to all students.  (W.2/2/WKP/SKOneB/V/04-03-2022)*

Based on this statement, researchers also carried out observations in the school environment. The observations show that 1 Buduran Vocational School has adequate facilities and infrastructure for the implementation of character education in the digital literacy era such as study rooms, practical laboratories, libraries, and crowded halls. So it can be interpreted that 1 Buduran Vocational School has carried out organizing in terms of task distribution, human resource development, budget management, and provision of facilities and infrastructure.

Strengthening character education in the era of digital literacy at 1 Buduran Vocational School has been strived to be carried out properly through strengthening environmental conditioning so that it is not just a slogan. Although the implementation of strengthening character education in the era of digital literacy at 1 Buduran Vocational School has been good, there are still shortcomings, as stated by Mrs. Agustina as the principal as follows.

> *The character education strengthening program in this school, Alhamdulillah, has been carried out well, although it can still be said that there are many shortcomings, but together we will always try hard to continue to improve in terms of shaping the character of our children, especially in today's sophisticated digital era. (W.2/3/KS/SKOneB/V/04-03-2022)*

Based on the information from the principal, it can be interpreted that 1 Buduran Vocational School has tried hard together in realizing character education in the era of digital literacy. According to the principal of 1 Buduran Vocational School, the implementation of strengthening character education in the digital literacy era begins with program socialization activities first as said during the interview session as follows.

> *After the planning process is carried out, what is done is the socialization process to all components involved with the aim that they can all understand and participate in implementing it well. (W.2/3/KS/SKOneB/V/04-03-2022)*

The principal's statement shows that communicating in advance the program to be implemented in the form of socialization is important to do. Socialization is carried out to all parties involved either through face-to-face or through the media. Furthermore, the Evaluation also includes oversight of responsible adoption of educational technology and responses to digital ethical challenges. Aside from an internal point of

view, evaluation involves the participation of parents and students to get more holistic feedback. By conducting continuous evaluations, 1 Buduran Vocational School ensures that the P5 program is not only relevant but also able to produce a significant positive impact on the formation of student character in this digital literacy era.

*Discussion*

Strengthening character education in digital literacy within 1 Buduran Vocational School can be a holistic integration model through several aspects, such as curriculum, learning, intra and extra coaching, as well as school culture and environment. First, the integration of character in digital literacy in the curriculum will provide a strong foundation for students to develop positive values along with their digital literacy skills (Alt & Raichel, 2020; Gutiérrez-Ángel et al., 2022; Nuryadi & Widiatmaka, 2023; Saripudin et al., 2021; Tzifopoulos, 2020). The selection of materials that not only cover technical aspects, but also digital moral and ethical values, can be a solid foundation for character development.

Second, classroom learning can be an effective means of shaping character through digital literacy. The use of interactive and collaborative learning methods, as well as the integration of character values in each lesson, can create a learning environment that supports positive character development (Herrera-Pavo, 2021; Qureshi et al., 2023; Septiani et al., 2020; Sudarmika et al., 2020; Thambu et al., 2021). Teachers can act as facilitators to link technology learning to desired moral values, giving students a deeper understanding of the positive impact of digital literacy (Bereczki & Kárpáti, 2021; Chiu et al., 2022; Falloon, 2020; Septiani et al., 2020; Yondler & Blau, 2023). Intra- and extra-school coaching can also be a place for character development through digital literacy. Extracurricular activities that focus on the application of digital literacy in the context of positive activities can help students practice character values in real situations. Intra-school coaching, such as leadership and social skills training, can complement character development efforts in the classroom.

School culture and environment have an important role in shaping the character of students. The existence of a school culture that supports positive values will create a conducive atmosphere for character development through digital literacy. A school environment that prioritizes collaboration, a sense of responsibility, and ethics in the use of technology will be a supporting factor for the formation of an example for school residents. By integrating the strengthening of character education in digital literacy into all these aspects, it is hoped that 1 Buduran Vocational School can become an educational institution that not only produces individuals who are technologically skilled, but also have strong character and are able to be an example for all school residents.

The implementation of strengthening character education in the era of digital literacy at 1 Buduran Vocational School has a significant positive impact on the development of students and the school environment as a whole. In the context of students, there is an increase in digital literacy skills through integrated activities in curriculum and learning. Digital literacy activities, such as 15-minute literacy at the beginning of lessons and Friday literacy activities, provide moments to discuss digital character values and ethics. Students become more skilled in using technology wisely, safely, and responsibly. In addition, extracurricular implementations, such as Rohis and One B Creative, also provide space for students to develop character according to their

interests and talents, creating an environment that supports the development of unique and diverse characters.

A positive impact is also seen in the school culture which creates a positive atmosphere related to literacy activities. Mini-library spots and reading policies become part of a culture of positive, responsible, honest, creative, and knowledge sharing that forms a conducive school environment for good character growth. The principal's leadership that shows exemplary digital literacy and character has had a positive impact, reinforcing the positive messages conveyed by the school to students (Rahayu & Dong, 2023; Rahman et al., 2021; Septiani et al., 2020; Siahaan et al., 2023; Widat et al., 2022; Widat & Wulandari, 2023; Yawisah et al., 2019).

## CONCLUSION

**Fundamental Finding :** The integration of character education within digital literacy at 1 Buduran Vocational School presents a holistic model encompassing curriculum, classroom learning, intra- and extracurricular activities, and school culture. This approach ensures students develop technical skills alongside positive values and ethical behavior in using digital tools. The curriculum emphasizes both technical and ethical aspects of digital literacy. Interactive and collaborative classroom methods, with character values embedded in all subjects, create an environment conducive to character development. Teachers act as facilitators, linking technological learning with moral values. Extracurricular activities and a positive school culture further support character development, with mini libraries and a reading culture enhancing this environment. Exemplary leadership from the school principal and parental involvement through digital literacy programs reinforce these efforts. While the program has significant positive impacts, such as improved digital literacy skills and a supportive school culture, potential negative aspects include the digital divide, gadget over-reliance, and technology misuse. Addressing these issues is crucial for the continued success of character education in the digital age. **Implication :** The successful implementation of character education through digital literacy at 1 Buduran Vocational School highlights the importance of a well-rounded educational approach. Schools looking to adopt similar models can draw valuable insights from this example, emphasizing the integration of ethical and moral values in digital literacy education. This approach not only prepares students for the technological demands of the future but also instills in them the character and values needed to navigate the digital world responsibly. **Limitation :** While the model at 1 Buduran Vocational School shows promising results, it may not be directly applicable to all educational settings. Variations in resources, teacher expertise, and student demographics could affect the implementation and outcomes of such programs. Additionally, ongoing assessment and adaptation are necessary to address emerging challenges in digital literacy education. **Future Research :** Further research could explore the long-term impacts of integrating character education with digital literacy on students' personal and academic development. Comparative studies between different schools or regions could provide deeper insights into best practices and potential adaptations of the model. Investigating the role of emerging technologies and their ethical implications will also be crucial in shaping future educational strategies in this area.

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**\* Dr. Dhanu Lukmantoro (Corresponding Author)**
Department of Graduate School, Education Management
State University of Surabaya,
Jl. Lidah Wetan No.1 Surabaya, East Java, 60213, Indonesia
Email: danu.lukmantoro@gmail.com

**Dr. Nunuk Hariyati**
Department of Graduate School, Education Management
State University of Surabaya,
Jl. Lidah Wetan No.1 Surabaya, East Java, 60213, Indonesia
Email: nunukhariyati@unesa.ac.id

**Prof. Dr. Yatim Riyanto**
Department of Graduate School, Education Management
State University of Surabaya,
Jl. Lidah Wetan No.1 Surabaya, East Java, 60213, Indonesia
Email: jatimriyanto@gmail.com

**Dr. Sri Setyowati**
Department of Graduate School, Education Management
State University of Surabaya,
Jl. Lidah Wetan No.1 Surabaya, East Java, 60213, Indonesia
Email: srisetyowati@unesa.ac.id