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MANAGEMENT OF SOFT SKILLS DEVELOPMENT ACTIVITIES THROUGH THE DIGITAL MADRASA PROGRAM IN THE SCHOOL ENVIRONMENT

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ABSTRACT

The main objective of this study is to analyze the management of the Digital Madrasah program in improving students' soft skills. The program is targeted to develop students' communication, collaboration, problem-solving and leadership skills through a technology-based approach. The focus on this objective is grounded in the fact that in the digital era, soft skills play a key role in one's academic and professional success. This research used a qualitative approach with a case study method to analyze the management of the Digital Madrasah Program. Data were collected through observation, in-depth interviews with the madrasah principal, teachers, and students, and curriculum documentation. Descriptive analysis was used to describe the main elements of the program, including objectives, implementation, and outcomes. The findings are expected to provide insights into the effectiveness of digital-based soft skills development and practical recommendations for other madrasahs. The results of this study show meaningful outcomes in the development of students' soft skills, especially communication, teamwork, and problem-solving skills through technology. The program increased students' confidence in online communication and digital presentation, and strengthened collaboration through technology-based projects. The development of critical thinking skills is also encouraged through the utilization of digital tools to solve complex challenges. The findings are in line with constructivism and self-efficacy theories that emphasize learning through experience and social interaction. This research contributes to the literature of technology integration in education for 21st century skills.

Keywords: *Soft Skills, Digital Madrasah, school environment*

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INTRODUCTION

MAN 2 Genteng, Banyuwangi, is one of the madrasah aliyah in Genteng, Banyuwangi which continues to develop following the development of technology and the needs of the times[1]. Established with the main objective to provide a strong religious-based education while providing life skills for its students, MAN 2 Genteng has now implemented various innovative programs to enrich the existing curriculum[2]. One of the flagship programs developed is the Digital Madrasah, which integrates digital technology in daily learning[3]. This program aims to equip students with 21st century skills, such as digital literacy, problem solving, and effective communication skills [4].

Soft skills, also known as soft skills, encompass interpersonal and intrapersonal abilities that include communication, collaboration, leadership, decision-making, and adaptability[5]. These skills are essential for building good relationships, working in teams, and facing complex challenges in the world of work and everyday life[6]. In the Digital Madrasah program, MAN 2 Genteng also manages various activities designed to improve students' soft skills, such as leadership, collaboration, and adaptability[7]. This development program is expected

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to not only make students more skilled in academics but also able to face the challenges of the dynamic world of work and social life[8].

With the support of technology, MAN 2 Genteng strives to become a superior and relevant madrasah, and is able to produce a generation that is smart, characterized, and competent in facing the digital era[9]. In the current educational context, developing soft skills among students is an important need along with the challenges faced in the world of work and social life[10]. MAN 2 Genteng, Banyuwangi, as an educational institution that is oriented towards quality and the times, realizes that academic ability alone is not enough to prepare students to face an increasingly complex world. Therefore, this madrasah took the initiative to develop the Digital Madrasah program as a means to strengthen students' soft skills, such as communication, collaboration, critical thinking, and leadership skills[11]. This social phenomenon reflects the changing demands of society towards education, where mastery of technology and interpersonal skills are prioritized[12].

In the Digital Madrasah program at MAN 2 Genteng, students not only learn about digital literacy, but are also taught to utilize technology as a self-development tool. The management of this program shows the madrasah's response to the evenly distributed flow of digitalization, including in the educational environment[13]. It also illustrates a paradigm shift in education that prioritizes a balance between academic and social skills[14]. For the community, especially parents, the existence of a

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Vol. 13. No. 01. Februari, 2025, Hal: 170-186

program like this gives more trust to educational institutions to educate their children comprehensively, preparing them to have skills that are relevant to the times. The program also has a positive impact in building students' character, making them more confident and ready to face social changes that occur in society[15]. This phenomenon shows that adaptive and innovative education is able to answer social needs and create a competitive and resilient generation in facing the digital era [16].

Previous research on the development of *soft skills* through technology-based approaches in the educational environment shows positive results and is relevant to the objectives of the *Digital Madrasah* program at MAN 2 Genteng, Banyuwangi. a study by Surahman & Fitria, on the application of digital technology in madrasah found that technology integration not only improves academic *skills* but also strengthens *soft skills*, such as the ability to work in teams and effective communication[17]. This happens because students are encouraged to collaborate virtually and utilize digital media in completing group tasks. The research also highlights that students who engage in technology-based learning tend to have a better understanding of how to solve complex problems, which is an important part of critical thinking skills[18]. Another research by Nikmawati, shows that schools that implement digitalization programs have students who are more adaptive to changes and have better *soft skills* proficiency compared to schools that still use conventional learning methods[19]. This research supports the idea that the use of technology in education not only improves technical skills but also encourages students to be more independent, creative, and able to manage time well

The novelty in the research on the Management of Soft Skills Development Activities through the Digital Madrasah Program in the School Environment of MAN 2 Genteng, Banyuwangi lies in the deep integration between *soft skills* development and digital technology in the context of madrasah. Most previous

Education 11, no. 1 (December 31, 2024): 2335720, https://doi.org/10.1080/2331186X.2024.2335720.

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[18] Abdullah Al Masud et al., "The Emergence of Digital Learning in Higher Education: A Lesson from the COVID-19 Pandemic," *The International Journal of Information and Learning Technology* 40, no. 3 (January 1, 2023): 202–24, https://doi.org/10.1108/IJILT-08-2022-0176.

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Vol. 13. No. 01. Februari, 2025, Hal: 170-186

studies discuss *soft skills* development or the use of digital technology in schools, but rarely connect the two specifically in the context of religious-based educational institutions such as madrasah. This research is unique because it focuses on the application of digital technology to build students' interpersonal and intrapersonal skills in an environment that prioritizes Islamic values. With the existence of *Madrasah Digital*, the program not only promotes digital literacy, but is also designed to strengthen students' character through activities that train communication, leadership, and collaboration, which are important to form a competitive person in the digital era[20].

The main objective of this study is to analyze the management of the Digital Madrasah program in improving students' *soft skills* at MAN 2 Genteng, Banyuwangi. The program is targeted to develop students' communication, collaboration, problem-solving, and leadership skills through a technology-based approach. The focus on this goal is grounded in the fact that in the digital era, *soft skills* play a key role in one's academic and professional success. In the midst of rapid changes in the world of work that increasingly prioritize social skills and adaptability, students need to be equipped with abilities that go beyond academic knowledge, so that they are able to adapt and compete in a dynamic environment[21].

Madrasahs as religious-based educational institutions are usually better known for their focus on spiritual and academic values[22]. However, with the presence of the Digital Madrasah program, MAN 2 Genteng shows a commitment to equip students with *soft skills* that are relevant to today's needs, without neglecting religious values. An analysis of the effectiveness of the management of this program is expected to provide a deeper understanding of relevant teaching methods in a madrasah environment, as well as offer insights into how madrasahs can remain relevant and excel in the digital era. By measuring the success of this program, the results of this study will make an important contribution to the development of education in madrasahs across Indonesia.

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Vol. 13. No. 01. Februari, 2025, Hal: 170-186

RESEARCH METHODS

This research uses a qualitative approach with a case study method to analyze the management of *soft skills* development activities through the Digital Madrasah Program at MAN 2 Genteng, Banyuwangi. A case study was chosen because this method allows researchers to analyze in depth and holistically how the program is designed, managed, and implemented in a madrasah environment. Data will be collected through observation, in-depth interviews, and documentation. Observations were conducted in classrooms and digital spaces of the madrasah to directly observe student interactions in activities that support the development of *soft skills*, such as group work, discussions, and technology-based collaboration. In-depth interviews were conducted with the madrasah principal, teachers, and students to understand their perspectives on the purpose, implementation, and challenges in managing this program[23].

The data obtained was then analyzed descriptively to understand the basic concepts applied in the Digital Madrasah program. This descriptive analysis approach allows researchers to clearly describe various important elements in program management, such as objectives, implementation methods, and results achieved. Furthermore, the results of observations and interviews will be explained to identify key findings related to the effectiveness of the program, students' responses to technology-based activities, and the contribution of *soft skills* to student character building[24]. The results of this analysis are expected to provide a clear and easy-to-understand picture of how digital-based *soft skills* development activities are managed in madrasahs, as well as provide practical recommendations that can be applied in other madrasahs in Indonesia[25].

To obtain in-depth data related to the management of the Digital Madrasah Program, this study involved several categories of key informants. The informants consisted of the madrasah head, teachers, students and madrasah IT staff. The madrasah head provided insights into the program's policy and vision, while teachers contributed in explaining the implementation of activities and the challenges faced. Students were included to understand their experience in participating in technology-based activities, as well as the impact on soft skills development. In addition, IT staff provided information regarding the technical support required in this program. The following table summarizes the categories of informants in this study:

[23] Nicholas Walliman, *Research Methods: The Basics* (Routledge, 2021).
[24] Monique Hennink, Inge Hutter, and Ajay Bailey, *Qualitative Research Methods* (Sage, 2020).
[25] Radix Prima Dewi, "Case Study-Qualitative Research Methods," 2019.

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Vol. 13. No. 01. Februari, 2025, Hal: 170-186

Table 1: Composition of Research Informants of the Digital Madrasah Program

NO	JOB	GENDER TYPE	JOB CODE	AMOUNT
1	Head of Madrasah	Male	KM	1
2	Teacher	Male/Female	GR	3
3	Students	Male/Female	SS	5
4	Madrasah IT Staff	Male	IT	1

This table helps explain the composition of informants selected to obtain comprehensive data, support in-depth analysis, and ensure a diversity of perspectives in the research.

RESULTS AND DISCUSSION

With the rapid development of digital technology, the development of soft skills is becoming increasingly important, as these skills support future academic and professional success. The Digital Madrasah program at MAN 2 Genteng is designed to integrate technology in learning, with the hope of facilitating students in developing the skills needed to face global challenges. Through various technology-based activities, students are expected to improve their interpersonal skills and teamwork abilities that are needed in the world of work. The research results show various findings that provide an overview of the extent to which this program contributes to the development of students' soft skills, as well as the challenges and successes found during its implementation. The following are the main findings obtained from this research, as follows.

Improved Student Communication Skills

The Madrasah Digital program has successfully improved students' communication skills, especially in the context of online communication and digital presentations. Students are better able to convey ideas and communicate clearly through various technology platforms. The program utilizes various digital platforms to strengthen students' ability to communicate, both in the context of online and digital presentations. Good communication skills are not only limited to the ability to speak in person, but also include the ability to convey ideas effectively through digital media, which is now an important part of everyday life, both in education and the professional world. With learning activities that emphasize online discussions, group presentations and the use of digital communication applications, students are given the opportunity to hone their ability to convey information in a more structured and efficient manner. To dig

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Vol. 13. No. 01. Februari, 2025, Hal: 170-186

deeper into this, an interview was conducted with one of the students, informant A, who actively participated in the Madrasah program

> *"At first, I had trouble speaking in front of my friends online. But after presenting frequently using Google Meet and Zoom, I became more confident. The presentation exercises and group discussions helped me convey my ideas more clearly and organize my words. Feedback from teachers and friends was also very helpful, making me more adept at public speaking, both at school and in everyday life."*

These interviews show that through technology-based learning activities, students like Informant A have experienced significant improvements in their communication skills. The use of online platforms not only facilitates the learning process, but also provides opportunities for students to practice speaking and conveying ideas more effectively, which is certainly an important skill in the future. The following figure 1 shows the improvement of students' communication skills in the Digital Madrasah program. This visualization illustrates the various aspects of students' abilities, from self-confidence to communication flexibility, which were honed through online activities and presentations."

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Vol. 13. No. 01. Februari, 2025, Hal: 170-186

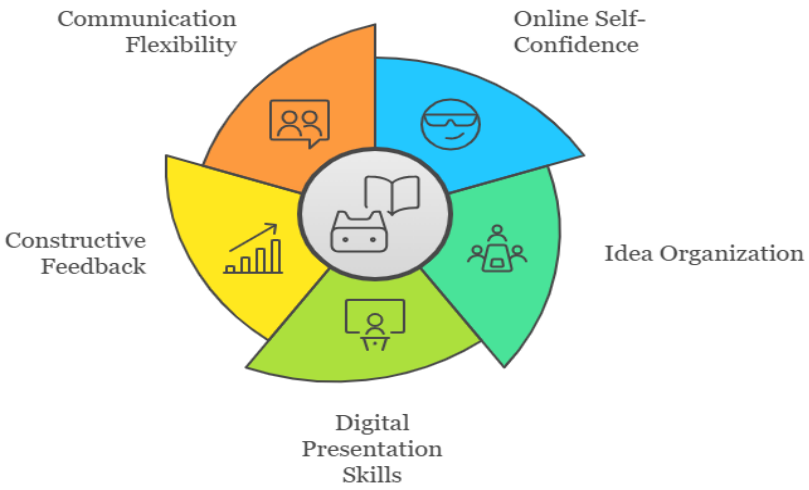

Figure 1: Improving Students' Communication Skills

The indicators in Figure 1 explain that the improvement of students' communication skills in the Madrasah Digital program includes several important aspects. First, confidence in online communication increased, as seen from students who initially had difficulty speaking in front of friends online, are now more confident after frequent practice using platforms such as Google Meet and Zoom. Secondly, students demonstrated the ability to organize words and convey ideas clearly, thanks to presentation exercises and group discussions. Third, students' digital presentation skills are honed, along with the use of applications such as Zoom and Google Meet to convey information effectively. Fourth, constructive feedback from teachers and peers helped students improve their communication skills. Finally, the ability to communicate in various contexts, both in person and through digital media, shows students' communication flexibility that is maturing and ready to be applied in the professional world.

The interpretation of the results shows that the Madrasah Digital program significantly improved students' communication skills, especially in the context of online communication and digital presentations. Students who initially found it difficult to speak in front of friends online, as experienced by informant A, now feel more confident after practicing frequently using platforms such as Google

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Vol. 13. No. 01. Februari, 2025, Hal: 170-186

Meet and Zoom. This is in line with Rachmawati et al.'s *self-efficacy* theory, which states that a person's confidence to perform a task will increase along with the experience and success he has achieved[26]. In this context, repeated experiences through online discussions and group presentations help students hone their speaking skills, so that their confidence in communicating is stronger.

From the perspective of constructivism learning theory, proposed by Sayaf, students do not only learn from the information provided, but also through social interaction and direct experience[27]. In this case, the use of digital platform as a tool to communicate and collaborate in online learning gives students the opportunity to build their knowledge actively through discussion, presentation, and feedback from teachers and peers. This supports deeper and more significant learning, where students' communication skills develop naturally through social processes.

In addition, previous research, such as that conducted by Serrano et al. shows that the use of technology in education can enrich the learning experience and encourage students to be more open in communicating[28]. The study emphasizes that technology is not only a learning aid, but also an important means to develop social and communication skills that are highly needed in the professional world.

Digital Collaboration Improves Teamwork

The Digital Madrasah program at MAN 2 Genteng not only focuses on developing technical skills, but also pays great attention to improving students' social and interpersonal skills, especially in terms of collaboration. Technology-based collaborative activities, such as online group projects and online discussions, are an integral part of the program. The use of apps such as Google Classroom, Zoom, and other digital platforms facilitate students to work in teams effectively despite being in different locations. This approach encourages students to more actively interact, share ideas, and work together in completing tasks or projects. These collaboration skills acquired through digital media are important for forming solid teamwork habits, which are not only useful in educational contexts but also in the future professional world. To confirm this finding, an interview was conducted with one of the students active in various digital collaborative projects, Informant S, a grade XII student. The following is an excerpt of his interview:

[26] Rachmawati et al., (2021)
[27] Sayaf, (2023)
[28] Serrano et al., (2019)

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P-ISSN: 2338:6673; E:ISSN 2442:8280
Vol. 13. No. 01. Februari, 2025, Hal: 170-186

> *"At first, I was confused about working in a team online, but after using Google Classroom and Zoom frequently, it became easier for me to share tasks and communicate. The online discussions helped me to be more organized and respect other people's opinions. We can have open discussions even if we don't meet in person, and this has improved my ability to work with a team even if we are in different places."*

These interviews show that technology-based collaborative activities have a positive impact on improving students' teamwork skills. Through platforms such as Google Classroom and Zoom, students can more easily coordinate, share ideas and discuss projects efficiently. It also helps them develop interpersonal skills, such as effective communication and the ability to cooperate with a wide range of individuals, which are crucial in a world of work that increasingly relies on technology.

The interview with Informant S revealed that the use of digital platforms in the Madrasah Digital program had a positive impact on students' teamwork skills. Despite initially feeling confused about working in a team online, Informant S admitted that the use of applications such as Google Classroom and Zoom made the process of collaboration and communication in the group easier. This shows that technology-based collaborative activities can help students adapt and improve their social skills, despite not being face-to-face. This phenomenon is in line with the *collaborative learning* theory proposed by Serrano et al., which states that collaboration in teams can strengthen understanding, social skills and communication between individuals[29]. In the context of online learning, digital platforms become an effective means to create interactions that encourage students to share ideas, discuss problems, and complete tasks together, despite being in different locations.

From the perspective of *Social Interdependence* theory also developed by Van Lange & Balliet, successful collaboration in teams depends not only on individual abilities, but also on the interdependence between team members[30]. The use of digital platforms such as Google Classroom and Zoom allows students to support each other and coordinate more efficiently, strengthening social relationships within the team and improving overall teamwork outcomes. In

[29] Serrano et al., (2019)
[30] Van Lange & Balliet, (2015)

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Vol. 13. No. 01. Februari, 2025, Hal: 170-186

addition, a study by Aldraiweesh & Alturki, showed that the use of technology in learning can improve communication and cooperation skills among students, which is also relevant to these findings[31]. Thus, the Digital Madrasah program at MAN 2 Genteng not only enhances students' technical skills, but also provides them with opportunities to develop social and teamwork skills that are much needed in an increasingly digital professional world.

Improving Problem Solving Skills through Technology

The Digital Madrasah program at MAN 2 Genteng not only focuses on improving technical skills, but also plays an important role in developing students' problem-solving skills. In this program, students are invited to face various challenges through technology-based projects, which forces them to think critically and creatively. The use of technology as a problem-solving tool allows students to hone their analytical skills and expand their thinking to find effective and innovative solutions. Through digital projects, students are required to integrate their knowledge and skills and adapt quickly to new situations that require practical solutions. This not only enriches students' learning experience, but also prepares them to face challenges in a professional world that increasingly relies on technological capabilities and creativity in problem solving. To dig deeper into this, an interview was conducted with one of the students who has actively participated in technology-based projects, namely Informant R, a grade XI student. The following is an excerpt of the interview with Informant R:

> *"My first assignment was to create a digital presentation to solve a social problem. We used various editing apps and online research to find solutions. The biggest challenge was managing time and integrating the team's ideas, but with the help of Google Docs and Google Meet, we were able to complete the task on time. Technology helped us stay focused on the solution and complete the project in a more organized manner."*

These interviews revealed that technology-based projects not only teach students how to use digital devices, but also develop critical thinking skills in solving problems. Through the use of technology, students like Informant R are able to identify problems, analyze possible solutions, and design creative approaches to overcome challenges. This shows how technology can be an

[31] Aldraiweesh & Alturki, (2023)

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P-ISSN: 2338:6673; E:ISSN 2442:8280
Vol. 13. No. 01. Februari, 2025, Hal: 170-186

effective tool in honing problem-solving abilities and enriching students' learning process.

This interpretation of the findings suggests that the use of technology in digital-based projects can improve students' problem-solving skills. Informant R revealed that in completing the digital presentation task, he and his team had to manage time, integrate ideas, and find solutions to social problems using various editing applications and online research. The challenges they faced, such as managing time and integrating team ideas, were overcome with the help of technology, such as Google Docs and Google Meet. This confirms that technology does not only serve as a technical tool, but also as a means to develop critical and creative thinking skills in dealing with problems.

This finding is in line with the theory of *learning*, developed by Schwartz, which emphasizes the importance of problem-based learning experiences in developing critical thinking and problem solving skills[32]. In *problem based learning*, students are confronted with real problems and have to find solutions independently or through teamwork. The use of technology in problem-based learning enriches this process, as it allows students to access a wider range of resources, such as information from the internet or digital tools for analysis and presentation.

Previous research by Ukobizaba et al. also suggests that the use of technology in education can improve students' problem-solving skills by giving them access to a range of potential solutions and enabling more effective collaboration[33]. In addition, research by Ruth Swart revealed that technology supports the development of critical thinking skills by allowing students to explore multiple perspectives and solutions[34]. Thus, technology in the Digital Madrasah program not only teaches technical skills, but also prepares students to be creative and innovative problem solvers in the professional world.

CONCLUSIONS

Research on the Digital Madrasah Program at MAN 2 Genteng showed significant results in the development of students' soft skills, especially in three main aspects: communication skills, teamwork, and problem solving through technology. The program succeeded in improving students' communication skills,

[32] Schwartz, (2013)
[33] Ukobizaba et al. (2021)
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P-ISSN: 2338:6673; E:ISSN 2442:8280
Vol. 13. No. 01. Februari, 2025, Hal: 170-186

especially in the context of online and digital presentations, as corroborated by interviews that showed an increase in students' confidence in conveying ideas. Students' collaboration skills also improved through technology-based activities such as online group projects, which strengthened teamwork and interpersonal interactions. In addition, the program encourages the development of critical and creative thinking skills through technology-based projects, allowing students to utilize digital tools to solve complex challenges.

In the context of the discussion, these findings are in line with the learning theories of constructivism and self-efficacy, which emphasize learning through experience and social interaction. The relevance of these results is also supported by the literature highlighting the role of technology in education to hone students' social and technical skills. This study makes an important contribution to the literature on the integration of technology in education and its implications on the development of 21st century skills, and provides recommendations for improving the effectiveness of technology-based programs in the future.

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