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Accountability management system of superior elementary school for digital transformation

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ABSTRACT

The purpose of this research is to find out i) the quality of the accountability management system of superior schools, ii) elementary school digital transformation capabilities, and iii) the relationship between the quality of the accountability management system for superior schools and the digital transformation capabilities of elementary schools in Indonesia. The research approach used is quantitative. The research location is in public elementary schools in Malang City. The population of this research is all 195 public elementary schools. The research sample is 22 public elementary schools. The research subjects were school principals, class teachers, and subject teachers totaling 51 people. Data collection is done by using a questionnaire. Elementary schools with superior school accountability management systems have the ability to drive their digital transformation capabilities. Excellent school accountability management systems and school digital transformation capabilities guarantee equal access to education for all students. Implications for improving teaching and learning are also discussed in this paper. The variables studied can be used to determine the priority scale for planning, implementing and evaluating superior school accountability management systems in digital transformation, in increasing teacher competency.

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1. INTRODUCTION

The COVID-19 pandemic was the background for the birth of the Merdeka curriculum, the learning crisis facing the world of Indonesian education prompted the government to roll out this curriculum reform policy. Before transforming into the Merdeka curriculum, it was originally called the prototype curriculum [1]. The government seemed confused at that time [2]. The government does not seem confident in implementing the prototype curriculum. Apart from the management implications, with only two years remaining in the government term, this curriculum has the potential to wither before it develops. This latest development does not want to be called the 2022 curriculum or Merdeka curriculum, it wants to be titled the prototype curriculum, because it is optional [3]. Schools can choose whether to use it or not. Compared to the previous curriculum, the development can be seen in several aspects, which of course have implications for its implementation. Previously, the 2013 curriculum was implemented massively [4], especially socialization involving many instructors who come from teachers, school principals, supervisors, university lecturers who are provided with training. Various training, technical guidance, assistance and curriculum workshops are

carried out at the national, provincial, district/city, education office, sub-district, cluster and various teacher working groups/deliberations levels.

Massive socialization like that alone means that research results are said to be uneven. At that time there were obstacles faced by the government, education units, teachers, parents and students. Constraints from the government include book distribution, assessment, teacher administration, time allocation, socialization, implementation of thematic learning, curriculum implementation guides, and learning activities in student books [5]. Constraints in educational units include facilities, infrastructure and teacher rotation, both vertical and horizontal. Obstacles from teachers include creating learning media, teacher understanding, integrating lesson content in thematic learning, and mastering information technology. Obstacles from parents and students include report cards and adaptation to thematic learning.

Until the end of 2021, the problem of implementing the 2013 curriculum has not been resolved and is hampered, almost a decade later. Look again, the government's ultimatum to stop the 2006 curriculum at the end of 2020. Meanwhile, the Merdeka curriculum is still weak in socialization. The development is also devoid of public discussion participation. Even later, implementation does not require schools, it is only optional. The government seems confused, not sure about taking steps. Not confident. The end of the reign is not long, in two years. It seems the government is good at making political calculations. Don't want to be considered a failure in implementation, such as the massive implementation of the 2013 curriculum. The prototype curriculum has the potential to wither before it develops. Remember the adage, change the minister, change the curriculum [6]. Or the curriculum keeps changing, the quality of education never changes, it keeps being low.

The fate of this Merdeka curriculum seems to be the same as the 1950 curriculum and was amended in 1952, because it does not contain clear educational objectives. Or the 2004 curriculum, which was still centralized, was changed to the 2006 curriculum, which was decentralized. Both were preceded by a change of ministers. Prototype curriculum implementers in educational units are threatened with being held hostage to curriculum supplements.

Of course, curriculum development is absolutely necessary. But it is not just the principles, structures, methods and strategies for achieving curriculum and learning goals that keep changing and tend to be less effective. Development is more important, it should have a bigger impact on the coverage, depth and breadth of the material/curriculum content. The purpose of this research is to determine the influence of implementation barriers, superior characteristics on the future of the Merdeka curriculum management system in elementary schools.

The superior school accountability management system is an indicator of efficiency and effectiveness in running school programs [7], [8]. The system should ideally provide strong capabilities to support educational and learning needs as a foundation in the digital transformation of primary schools [9]. The core digital capabilities of a good school allow principals and teachers to communicate easily with parents, students and the school community [10], [11]. School accountability is a means for the educational community to monitor student and school performance [12], [13]. The performance of the monitoring results is a superior benchmark for each school. It can also be compared between schools, so that certain schools have superior criteria and others do not.

School accountability means car rying out roles and tasks responsibly as they should [14]. School accountability consists of four core components: participation, evaluation, transparency, and feedback mechanisms [15]. This means school accountability is achieved when goals are in place, ownership is delegated, transparent evaluation occurs, complete transparency occurs, and there is regular feedback. School digital transformation drives accountability [16], through transparency of educational inputs, processes, and outputs [17]. Harnessing the potential of digital technology and data is key to staying relevant in the information technology space. Digital transformation, or the adoption of emerging and fundamental digital technologies, creates new opportunities and risks. Transparency allows schools to collect data and use it to make better and faster decisions within their management systems.

In Indonesia, school accountability is developed by the central government [18], [19]. The form of school accountability can be seen in various nationally applicable education standards [20]. Digital transformation can be a driving force for better standardization. Indeed, currently, the implementation of national education standards in Indonesia has not been successful [21]. Various obstacles can be encountered, one of which is because of Indonesia's geographical archipelago, the distance between regions is an obstacle [22]. Apart from the large population, the mental attitude that does not support digital transformation is also a problem in itself [23].

The COVID-19 pandemic dealt a very heavy blow to digital capabilities [24]. Almost half of elementary schools are not ready to do distance learning. Online learning becomes an educational problem during a pandemic, due to social restrictions [25]. Schools are forced to rapidly undergo digital transformation [26], [27]. This research was conducted after the COVID-19 pandemic so it is very relevant to discuss digital school transformation, which was quickly carried out due to the pandemic. This study aims to determine the

relationship between the quality of the accountability management system of superior schools and the digital transformation capabilities of elementary schools.

2. METHOD

The research approach uses quantitative methods [28]. The research location is a public elementary school in Malang City, East Java Province, Indonesia. The population of this research is all 195 public elementary schools in Malang City. The research sample is 22 public elementary schools. The research subjects were school principals, class teachers, and subject teachers, totaling 51 people. The research location is a public elementary school in Malang City, East Java Province, Indonesia. The population is 195 public elementary schools. Sampling was carried out randomly, a probability sampling technique in which the total population is divided into groups based on homogeneous sub-districts. The number of research samples used was 22 state schools. The number of research respondents was 51 people consisting of class teachers (70.6%), subject teachers (5.9%), and school principals (23.5%).

The instrument used is a questionnaire [23]. Instrument testing was carried out by testing the validity and reliability, by comparing the Pearson product moment correlation index with a significance level of 5% [24]. The test results show that the probability of a correlation result is less than 0.05 (5%), so it is declared valid. The reliability test in this study is guided by the Cronbach Alpha value [25]. An instrument can be said to be reliable if it has a reliability coefficient of 0.6 or more. If alpha is less than 0.6 then it is declared unreliable and vice versa it is stated as reliable. The results of the test, the questionnaire was used as the basis for the assessment, which was carried out by the research team.

The stages taken by the researcher in collecting data were: i) the researcher made a questionnaire and discussed it with the research members, ii) the researcher determines the time to distribute the questionnaire, iii) researchers distribute research questionnaires, iv) respondents were asked to fill out or answer questions or statements in the questionnaire. When finished, collected back to the researcher, and v) researchers perform tabulation and analysis.

Data analysis techniques use statistics to find a relationship between two quantitative variables [29]. A simple correlation test is used to measure the strength of the relationship between the two variables in this study. Correlation is done very easily with software. The strength of the relationship between variables to measure the relationship is close, weak, or not close. While the form of the relationship is the form of positive linear correlation or negative linear. The technique used is the pearson product moment correlation. The hypothesis (H0) of this study is that there is a relationship between the quality of the accountability management system of superior schools and the digital transformation capabilities of elementary schools.

3. RESULTS AND DISCUSSION

There were 51 research respondents consisting of school principals (35.29%), class teachers (60.78%), and subject teachers (3.92%). The percentage of respondents based on gender, namely 19.61% male and 80.39% female. Table 1 shows the character of the research respondents.

Table 1 Research respondents

Number of respondents based on gender	Working time average	Status		
		Principal	Class teacher	Subject teacher
10 Male	12.27 Years	3	6	1
41 Female	14.15 Years	15	25	1

The indicator for the variable of the superior school accountability management system that has the highest score is that the school shows a conducive atmosphere for the entire school community and the school shows harmonious communication with the school community. The lowest score is indicated by the school indicator evaluating the vision, mission and objectives involving stakeholders and the results of evaluating the vision, mission and objectives are used for improvement. Indicators on school digital transformation capabilities which has the highest score, namely the teacher has competence in terms of communication technology. The lowest score is shown as an indicator of the use of technology that makes many processes virtual. Table 2 shows the indicator scores for the two variants studied.

Pearson's correlation results indicate that there is a high and positive relationship between the quality of the accountability management system of superior schools and the digital transformation capabilities of elementary schools, $r(10)=0.698$, $p=.000$. The research hypothesis is acceptable. That is, the higher the quality

of the school accountability management system, the higher the digital transformation ability of elementary schools. Table 3 shows the relationship between research variables.

Table 2 Research indicators score

	Research Indicators	Score	Criteria
1	The school provides a conducive atmosphere for the entire school community	243	High
2	The school shows harmonious communication with the school community	241	High
3	Schools develop school programs	239	High
4	The school implements the school program	239	High
5	The principal performs a management function on the results of academic supervision	235	Medium
6	The principal leads the school community to develop innovative ideas	235	Medium
7	The school socializes the school program	234	Medium
8	Teachers have competence in terms of communication technology	230	Medium
9	The school evaluates the vision, mission and goals	229	Medium
10	The results of the evaluation of the vision, mission and objectives are used for improvement	226	Medium
11	Adequate supporting facilities for ICT	225	Medium
12	Schools facilitate learning to online or mixed environments	218	Low
13	In implementation, teachers use instructional designs in addition to lectures	217	Low
14	In schools, technology is used that makes many processes virtual	206	Low

Table 3 Relationship between variables

Variables/analysis results		Management system	Digital transformation
Management system	Pearson correlation	1	.698**
	Sig. (2-tailed)		.000
	N	51	51
Digital transformation	Pearson correlation	.698**	1
	Sig. (2-tailed)	.000	
	N	51	51

**Correlation is significant at the 0.01 level (2-tailed).

The results of this study show that the average indicators for the variable school accountability management system are superior, still higher than the school's digital transformation ability variable. These results provide hope that the school management system is a good place for digital transformation capabilities to grow. This situation is very relevant as [30] stated that considering the results of digital transformation is very important. School management is an umbrella for teaching and learning facilities. Therefore, the role of digital transformation in school management needs to be underlined. Digital transformation affects the structure and governance of ecosystems, organizations compete and govern innovation in the digital world, processes for developing new products and services are changing under digital influence [31].

The results of this research show that there is an influence of superior school accountability management systems, digital transformation, and community participation on the quality of graduates. The quality of graduates produced by educational institutions has a huge impact on the social, economic and intellectual vitality of a nation [32]–[34]. To improve the quality of graduates, it is important to consider the role of superior school accountability management systems, digital transformation, and community participation.

Education is the core of community development [35]–[37], and the quality of elementary school graduates is the basis for future success [38], [39]. In this exploration, we delve into the intricacies of superior school accountability management systems, with the aim of uncovering the profound impact these systems have on the quality of elementary school graduates. We will carefully dissect the main components of this system, examine its effects, and dissect the latent benefits it produces for the world of education. This article seeks to provide a comprehensive and focused understanding of the important relationships between these systems and young students' trajectories.

The quality of education is a major concern for communities throughout the world. To improve education and ensure that all students receive a high-quality education, it is important to develop strong school accountability systems [40], [41]. The essence of the system is the establishment of appropriate learning standards. Learning standards are agreed-upon expectations that define what students should know and be able to do at a particular grade level or in a particular subject. These standards serve as a foundation for curriculum development, instructional planning, and student assessment. These regulations provide clear guidelines for educators and help ensure that all students receive a consistent and rigorous education.

Learning standards play an important role in shaping the curriculum [42], [43]. They serve as a blueprint for the content and skills students are expected to acquire at each grade level. A well-defined set of standards helps educators create a coherent and sequential curriculum that aligns with overall educational goals. This ensures that students progress through a structured and comprehensive learning journey.

Assessment is an important aspect of any educational system [44], [45]. Learning standards provide the basis for designing assessments that accurately measure student progress. High-quality assessments align with standards, reflecting what students have learned and their readiness to move on to the next level. These assessments are a fundamental component of school accountability systems, as they help track student achievement and evaluate the effectiveness of teaching methods and educational policies.

One of the basic principles of a superior school accountability system is ensuring educational equity. Learning standards can play an important role in promoting equity by setting clear expectations for all students, regardless of their background or location. When standards are well defined and universally applied, they help bridge the achievement gap by offering all students an equal opportunity to excel.

The process of setting appropriate learning standards involves collaborative efforts between educators, experts, and policy makers. Key considerations in this process include: i) Clarity and specificity: Learning standards must be clear, specific, and concise, leaving no room for ambiguity. They should outline what students should know and be able to do at each grade level or in a particular subject; ii) Research-based: Standards should be based on research and best practices in education. They should reflect current knowledge about effective teaching and learning; iii) Relevance to the real world: Standards must be relevant to students' real-world needs. They must prepare students for future academic and career success; iv) Flexibility: Standards should provide flexibility to accommodate a variety of learning styles and needs. While maintaining rigor, the regulations should not be overly prescriptive; and v) Regular review and revision: Learning standards should be reviewed and updated regularly to ensure relevance and alignment with evolving educational goals.

A superior school accountability system begins with setting appropriate learning standards [46], [47]. These standards not only provide clear expectations about what students should know and be able to do at each grade level, but they also provide a foundation for educational excellence. They are intricately intertwined with aligned learning objectives and serve as a thorough roadmap for student progress, ensuring that educational goals are met methodically.

A superior school's accountability system is closely linked to data, which is rooted in routine assessments of student performance [48], [49]. These assessments, ranging from standardized tests to formative evaluations and multifaceted measures, facilitate dynamic tracking of student progress. Data analytical skills guide educators in identifying areas needing improvement and enable appropriate instructional adjustments to meet each student's unique educational needs.

The effectiveness of accountability systems depends on careful evaluation and support of teacher performance [50], [51]. A system that prioritizes high-quality teacher training and ongoing professional development is critical to improving student outcomes. Teachers are elevated to the status of transformative agents in this ecosystem, empowered to provide the best education possible.

This accountability system is not limited to assessing individual performance but also includes accountability for the entire school [52], [53]. Schools must be monitored and their overall performance carefully evaluated, taking into account factors including attendance, discipline, and community involvement. Schools that consistently underperform face the possibility of comprehensive intervention and support, thereby establishing a conducive and nurturing learning environment for all. The impact of a superior accountability management system on graduates, namely: improved student outcomes, data-based assessment, professional development, and school-wide accountability.

The clear standards and assessments embedded in this system serve as a beacon of motivation for students and educators [54], [55]. High expectations for student performance permeate the learning environment, resulting in tremendous improvements in student learning and academic achievement. Data-driven assessments give educators the ability to design instruction tailored to the unique needs of their students. This personalized educational approach, coupled with early intervention and targeted support, is a lifesaver for students who may be struggling academically. A superior accountability management system places a relentless focus on teacher performance, driving them toward ongoing efforts for professional development. The result is a cadre of highly prepared and highly skilled teachers who have a major influence on student success.

This accountability mechanism is not just a measurement tool but a catalyst for creating a positive learning environment [56], [57]. A better school culture has a ripple effect, changing student behavior, engagement, and overall academic performance [58], [59]. The benefits and complexity of a superior accountability management system are visible in a superior accountability management system: Increasing student achievement, paving the way to higher education. Additionally, foster greater transparency and trust in the education system. A strong commitment to promoting equality, effectively narrowing achievement gaps between different student groups.

The challenge of a superior accountability management system, however, can be the specter of excessive "teaching to the test" and the concomitant narrowing of the curriculum. There is a need for wise allocation of resources to ensure that struggling schools receive the support they so desperately need. The importance of an accountability system that is designed wisely and carefully, with a commitment to

continuous improvement, to avoid the potential minefield of unintended consequences. An excellent school accountability management system includes a variety of strategies and processes aimed at ensuring that the educational institution is effective in it is mission. This includes setting clear learning objectives [60], [61], assess student performance [62], and implement data-driven decision making [63], [64].

This system provides a framework for evaluating and improving student and educator performance. Regular assessments and feedback loops enable institutions to identify areas requiring improvement and take proactive action to address deficiencies. An excellent school accountability management system encourages a culture of continuous improvement [65], [66] and accountability throughout the education system [67].

Digital transformation has revolutionized many aspects of our society, including the field of education [68], [69]. Elementary schools, which are the foundation of a child's educational journey, are also not immune to this transformative wave. The aim of this article is to provide a comprehensive study of the impact of digital transformation on the quality of primary school graduates. By delving into these different dimensions of influence, we aim to offer a differentiated understanding of the opportunities and challenges posed by the integration of digital technologies in basic education. One of the most prominent impacts of digital transformation in primary education is the shift towards personalized learning [70], [71]. Adaptive learning platforms and educational software can tailor instruction to the individual needs and progress of each student. This approach allows students to learn at their own pace, resulting in a more thorough understanding of the material.

The integration of digital tools has also led to the emergence of blended learning models, which combine traditional teaching methods with online resources [72], [73]. This approach has the potential to increase engagement and interaction, ultimately leading to improved learning outcomes. Digital transformation exposes elementary school students to a variety of digital tools and platforms. As a result, students increasingly develop digital literacy skills, including the ability to navigate and critically evaluate online information. These skills are critical in the 21st century and prepare students for the demands of the digital era.

Digital tools often encourage problem solving and critical thinking [74], [75], as students engage with interactive learning materials and educational games. This fosters skills that go beyond academic subjects, preparing students for real-world challenges. Although digital transformation has potential benefits, it also exacerbates existing inequalities. The digital divide, characterized by unequal access to technology and the internet, can hinder the educational progress of students from disadvantaged backgrounds. Policymakers and educators must address these disparities to ensure equitable opportunities for all students.

The increasing use of digital devices in primary education has raised concerns about excessive screen time and its potential impact on student health and wellbeing [76], [77]. Achieving a balance between technology use and physical activity is a complex challenge. Digital transformation in primary education is not without challenges, but has great potential in improving the quality of primary school graduates. To effectively harness the potential of digital technologies, educators must receive adequate training, curricula must be designed with a balanced approach, and policies must focus on bridging the digital divide.

The influence of digital transformation on the quality of elementary school graduates is very large and varied. Personalized learning [78], skills development [79], and the digital divide is a key factor shaping this influence [80]. While digitalization offers new opportunities for student growth, it also presents challenges that require careful consideration. As we progress, the education community must continue to adapt, innovate, and ensure that all students have access to the benefits of digital education, ultimately creating a generation of graduates ready to face the complexities of the digital era.

Digital transformation in education is a revolution that has the potential to change the way students learn and the way educators teach. This involves technology integration [81], [82], data analysis [83], [84], and online learning platforms [85], [86] into traditional educational practices. Digital tools and resources enable personalized learning experiences, increased access to educational materials, and real-time assessment of student progress. Digital transformation also improves the educational landscape by expanding the reach of quality education to underserved communities [87], [88]. This empowers educators and students to engage with the latest pedagogical approaches and innovative teaching methods. Additionally, it opens up new opportunities for collaboration, research and development of critical digital skills that are increasingly relevant in the modern workforce.

Quality education is an essential component of a thriving society, and the role of society in shaping educational experiences is increasingly recognized as critical. Community participation in education goes far beyond traditional parent-teacher associations; this covers a spectrum of activities, from volunteering to building local support networks and resources. This article digs deeper into the various dimensions of community involvement and their influence on the quality of elementary school graduates.

Community participation plays an important role in improving the academic achievement of elementary school students [89], [90]. Parents, caregivers, and community members can contribute in a variety of ways, including: Community members can provide academic support to students by helping with homework, reinforcing classroom learning, and offering valuable resources, which can have a positive impact

on students' academic performance. Communities often offer enrichment programs, such as after-school tutoring and summer camps, that expand students' knowledge and skills, giving them a competitive edge. By establishing community libraries, computer laboratories, and other educational resources, communities increase access to learning materials and technology, thereby contributing to better educational outcomes.

The impact of community participation goes beyond academics to foster the social and emotional development of elementary school students. Mentorship programs facilitated by community members create positive role models and support networks for students, cultivating their emotional well-being and social skills. Being involved in a community helps students develop a sense of belonging and social responsibility, contributing to their emotional development and overall resilience. Communities that foster positive relationships between students and adults provide a nurturing environment that fosters emotional intelligence and interpersonal skills.

Deepening our understanding of the influence of community participation in education requires a focus on collaboration between teachers and communities. Effective communication between teachers and community members ensures that student needs are met, and feedback mechanisms provide valuable insight into student progress. Communities can contribute by sharing their expertise, resources, and experience, thereby enriching the educational environment. Strong partnerships between teachers and parents in the community encourage an integrated approach to education and student well-being.

Community participation in education has a significant effect on the quality of elementary school graduates, impacts academic achievement, social emotional development, and teacher-community collaboration. A deeper understanding of the mechanisms and intricacies of these influences provides valuable insight into shaping successful and well-rounded young individuals. To create a brighter future, educators, policymakers, and community members must work together to harness the transformative power of community participation in education.

Community participation in education fosters a sense of shared responsibility for the quality of graduates [91]–[93]. When communities are actively involved in schools, this strengthens the link between education and local needs, values and aspirations. Parents, local businesses, and community organizations can provide valuable support and resources for schools. Involving the community in the educational decision-making process not only contributes to a more holistic education but also encourages a sense of ownership and pride in the local school system. This, in turn, can increase support for educational initiatives and improve learning outcomes.

The synergy between a superior school accountability management system, digital transformation and community participation is a real potential for improving the quality of graduates. When these three elements work together, they create a powerful ecosystem that benefits both educators and students. A superior school accountability management system, when integrated with digital tools, enables efficient monitoring and analysis of student performance, allowing educators to tailor instruction to individual needs.

Digital transformation increases the accessibility and relevance of education [94]–[96] enabling students to engage with cutting-edge technology and resources that prepare them for the challenges of the digital age. Community participation ensures that education remains relevant to local needs and fosters a supportive environment for students to thrive.

This synergy ensures that graduates are not only academically proficient but also well-rounded individuals with the skills and knowledge necessary to excel in a rapidly changing world. The synergy between a superior school accountability management system, digital transformation, and community participation is a multifaceted phenomenon that greatly impacts the quality of graduates. Let's delve further into how these factors interact and reinforce each other.

A superior school accountability management system, supported by robust data analytics, enables educators to track and assess individual student progress. This data, combined with digital transformation, enables personalized learning experiences. Educators can identify specific areas where students may be struggling and provide targeted support or advanced materials to challenge high-achieving students. Real-time feedback loops ensure that interventions are timely and effective. Community participation in this process can further enhance personalization. Parents and community members, when involved, can provide valuable insight into students' non-academic needs and interests, thereby contributing to a more holistic approach to education.

Digital transformation in education not only complements traditional teaching methods but also fosters 21st century skills such as critical thinking, problem solving, and digital competence. Students through digital devices become proficient in using technology as a tool for learning and solving problems. An excellent school accountability system can monitor and assess the development of these skills. This synergy ensures that students graduate not only with subject knowledge but also the ability to navigate an increasingly digital world.

Community participation can contribute by introducing students to the real-world application of digital skills [97], [98], enabling students to engage with cutting-edge technology and resources that prepare them for the challenges of the digital age. Community participation ensures that education remains relevant to local needs and fosters a supportive environment for students to thrive. This synergy ensures that graduates are not only academically proficient but also well-rounded individuals with the skills and knowledge necessary to excel in a rapidly changing world. The synergy between a superior school accountability management system, digital transformation, and community participation is a multifaceted phenomenon that greatly impacts the quality of graduates. Let's delve further into how these factors interact and reinforce each other.

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Community participation in this process can further enhance personalization. Parents and community members, when involved, can provide valuable insight into students' non-academic needs and interests, thereby contributing to a more holistic approach to education. Digital transformation in education not only complements traditional teaching methods but also fosters 21st century skills such as critical thinking, problem solving, and digital competence. Students through digital devices become proficient in using technology as a tool for learning and solving problems. An excellent school accountability system can monitor and assess the development of these skills. This synergy ensures that students graduate not only with subject knowledge but also the ability to navigate an increasingly digital world.

Community participation can contribute by introducing students to the real-world application of digital skills [99], [100], which is especially valuable for disadvantaged students [101]. When community participation is integrated into systems of accountability and digital transformation, it can facilitate the identification of students who may need additional support. Digital tools can connect students with mentors or tutors from the community, expanding the reach of school resources. Additionally, community businesses can provide apprenticeship or apprenticeship programs, connecting the educational system with potential future job opportunities.

The influence of a superior school accountability management system, digital transformation, and community participation on the quality of graduates cannot be denied. When these elements are combined effectively, a strong educational ecosystem is created that empowers students, educators and communities. As we progress into the 21st century, it is critical that educational institutions, policymakers, and society work together to harness the full potential of these factors to shape the future of our graduates. By doing this, we can ensure that our graduates are ready to face the ever-evolving challenges and opportunities of the modern world.

In the contemporary world of education, the quality of the graduate community plays an important role in shaping the future of society and the economy. This article explores the diverse influences of superior school accountability management systems, digital transformation, and active participation on the quality of graduate communities, highlighting their interconnectedness and cumulative impact. A strong school accountability management system serves as the foundation of quality education. This ensures that educational institutions uphold high standards of performance and transparency. Such a system facilitates effective monitoring and evaluation of educational processes, allowing schools to identify areas for improvement. By holding institutions accountable, this system motivates schools to maintain high standards of teaching, faculty development, and student support services. This, in turn, results in an environment that is more conducive to academic and personal growth among graduate students.

The digital revolution has brought transformative changes in education. Technology integration increases access to educational resources, encourages interactive learning, and facilitates self-directed learning. Digital transformation, including online learning platforms, virtual classrooms, and artificial intelligence (AI)-based personalized learning, is equipping students with essential 21st century skills. In addition, this program also encourages collaborative learning, transcending geographic boundaries and fostering a diverse and globally connected graduate community.

Active participation of students and teachers is an important determinant of the quality of the graduate community. Encouraging student involvement in the decision-making process and extracurricular activities fosters a sense of belonging and ownership within the school. Additionally, active school involvement enhances the learning experience through guidance, and innovative pedagogy. Such active participation helps foster a dynamic and intellectually stimulating graduate community.

The influence of a superior school accountability management system, digital transformation, and active participation on the quality of the graduate community does not stand alone but is synergistic. Combined, these factors will create a dynamic educational ecosystem that empowers students to reach their full potential. The interaction between a well-run institution, advanced technology, and engaged participants produces a graduate community that is innovative, globally competitive, and committed to lifelong learning.

In today's rapidly evolving educational landscape, fostering a high-quality graduate community requires a multifaceted approach. Excellent school accountability management systems, digital transformation, and active participation are critical components that, when combined, contribute to the creation of a dynamic, adaptable, and empowered graduate community. These factors are not only interrelated but mutually reinforcing, resulting in holistic improvements in the quality of education and, by extension, the graduate community.

4. CONCLUSION

The results of this study show that the average indicators for the variable school accountability management system are superior, still higher than the school's digital transformation ability variable. Elementary schools with superior school accountability management systems have the ability to drive their digital transformation capabilities. Excellent school accountability management systems and school digital transformation capabilities guarantee equal access to education for all students. The competency component in digital transformation requires the preparation of educational staff, as early as possible from teacher-producing educational institutions. To improve the quality of education by training teachers in selecting and using appropriate communication technology tools and adapting educational content and methods depending on the teaching medium.

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