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# The Impact of Digital Transformation on Education Quality of Primary Schools in Abu Dhabi: A Review of the Literature

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## ABSTRACT

*The advancement in digitalization all over the world has dramatically improved education quality in schools. Despite lots of studies have found the importance of digital transformation in education institutions, this relationship has not been reported in schools in the United Arab Emirates. Therefore, the aim of this paper is to highlight the substantial impact of digital transformation in education, as well as investigating the significant impact of digital transformation on digital education quality of primary schools in Abu Dhabi. The analysis of literature reveals that digital transformation has made a substantial impact on education quality of schools by allowing schools to adapt to the ever-evolving technological landscape and better prepare students for the digital age. With the integration of digital technology in classrooms, students can engage in interactive and personalized learning experiences, making education more engaging and effective. To improve education quality through digital transformation, Abu Dhabi primary schools should consider several recommendations, such as investing in the necessary infrastructure and technology to ensure a seamless integration of digital tools and resources into the classroom. This includes providing high-speed internet access, modern devices such as laptops or tablets, and interactive digital learning platforms. Additionally, schools should prioritize training and professional development programs for teachers to enhance their digital literacy skills and ensure they can effectively utilize these tools in their teaching practices.*

**Keywords:** Digital transformation, digital education quality, education institutions.

## 1. Introduction

Today, the digital technologies are becoming more prevalent in our daily lives. While the educational environment is evolving every day with more sophisticated learning systems, the

  

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role of digital transformation in this scenario become more important than ever. Almost every aspect of human life has been influenced and revolutionized by the digital revolution (Makridakis, 2017). Globally, digital transformation is becoming a popular topic and a prominent trend that is reshaping society and future of organizations (Parviainen et al., 2017). In recent decades, of the digital transformation in all industries becomes decisive to obtain success and maintain competitive advantage in the market. In the education sector, schools and universities all over the world have to reconsider new approached for education, whereas information and communication technology has been implemented in large scale in educational institutions (Fredreric et al., 2021). Today, we can see an increasing number of schools beginning with the installation of cutting-edge hardware and software, such as smart boards, in classrooms and using augmented reality in classrooms. Because of the increasing use of technology in daily life and learning environments, most students are now born into a digital world (Balyer & Mer, 2018). As education quality schools is part of the mission and vision of successful schools (Tabroni & Ismiati, 2021), therefore every school should evaluate the impact of adopting digital transformation on the quality of education and students' achievement in school. To that end, the successful digital transformation in schools starts with the use of digital resources in the learning process (Fermin et al., 2020). Hence, it is important to underline how change and transformation should occur in the educational setting from the perspective of information technology, and it is advised to propose a framework for our educational system in accordance with the changing learning trends and digital transformation.

Although United Arab Emirates (UAE) is frequently listed high in global competitiveness rankings for digital transformation, related school development lags behind. Technology-rated school development in the UAE educational context, digital technologies are not used in class on a regular basis in comparison to other countries (OECD, 2015). Furthermore, when compared to other countries, UAE have average digital competencies. In general, schools are not always early adopters of new technology. As a result, digital transformation initiatives in education sector are moving at a slower pace in comparison to other sectors (Burns, 2018). The lack or absence of quality education and effective primary school management in the UAE is a pressing issue that needs to be addressed. Despite the country's rapid development and investment in education, there are still significant gaps in ensuring that students receive a high-quality education. This is particularly evident in primary schools, where the foundation for a child's academic journey is laid (Marquez et al., 2022). However, to the present, there is a dearth of studies that report how far primary schools in UAE adopted digital transformation. Therefore, this paper addresses these issues and highlight the effect of digital transformation on education quality in primary schools in Abu Dhabi.

  

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## 2. Education quality in UAE

The UAE Ministry of Education (MOE) has released a strategy plan for 2017-2021 with the goal of establishing an innovative education system capable of producing an informed and globally competitive society. The plan will incorporate people of all ages in order to satisfy future labor market needs. It is in charge of assuring the MOE's production quality and offering the best services to internal and external clients. The UAE abandoned the section system based on scientific and literary streams in order to educate students for the knowledge economy, replacing it with a two-track system: general education and advanced education. This stage seeks to offer students with the skills they need to succeed in further education and satisfy job market expectations. It also permits high school graduates to enter colleges directly rather than having to complete a foundation year, which will be phased out by 2018. The new structure will prepare students for direct admission to engineering, medical, and natural science programs at institutions in the UAE and around the world. Furthermore, assessing school quality is a top objective for the MOE. The ministry inspects schools on a regular basis to ensure excellent education and to assist school improvement and student success.

Several studies have been undertaken to assess the quality of education in UAE institutions. Gaad et al. (2006) investigated the organization, components, goals, and, eventually, efficacy of the UAE educational system. An inquiry revealed that there is a misalignment between what the system was created for, how it was delivered, and what was reviewed. Significant work is required to align this system, including extensive documentation in the form of teachers' guides, training sessions for teachers and supervisors, and suitable evaluation methods designed with systems thinking as the guide. In the same vein, Taha (2019) asserted that schools require inspection reports based on parental feedback in order for parents to be aware of the quality of education delivered to their children and make educated decisions. Furthermore, according to Taha (2019), teachers and school leaders are the most important component of the educational fabric, and these measures will have little impact on Arabic language education outcomes unless they are adequately prepared and receive ongoing and relevant training and support throughout their careers. Inspections by the Dubai Schools Inspection Bureau (DSIB) have been driven by key questions about student achievement, education quality, the extent to which schools are inclusive, the alignment of schools' goals with UAE National Agenda requirements, and the effectiveness with which they are governed, led, and managed (Al Ali et al., 2019). According to a 2014 World Bank report, the Knowledge and Human Development Authority governance approach of transparency, accountability, and strong stakeholder participation has not only increased awareness of the importance of school quality, but has also resulted in higher expectations among education consumers and providers (World Bank, 2014). In sum, the UAE is a wealthy and young country attempting to achieve world-class educational status. A review of

  

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the literature on education reform efforts in the UAE reveals considerable limitation in research. Because the review of the literature incorporates concepts from comparative education, additional research is required to develop schools with greater education quality, particularly through digital transformation.

**3. Digital transformation in UAE**

In the last decade, the UAE has seen a huge increase in digital transformation. The UAE's government is moving forward with the use of 21st-century technology in order to expand the country's resources. According to the UAE 2021 National Agenda, schools and universities must reform and transition from a more traditional manner of teaching and learning to one that is equipped with the technology that surrounds the 21st-century learning agenda. Furthermore, according to the 2021 vision, UAE students must try to be among the top in the world in math, science, Arabic, and English (Alyammahi, 2019). The UAE has committed to investments that will aid in this change and provide educational leadership teams with the authority they require to shape children's minds for the future. In recent years, the UAE has succeeded in exceeding the world's top advanced countries in terms of digitization, as well as in terms of digital transformation. The UAE has ascended to first place in several areas of digitization, outperforming well-known colleges throughout the world, thanks to such a clear plan and technological backing. As a result, the UAE education sector's technological transformation is vital to preserving the pace of Dubai's transformation into a smart city. Since the inception of the Smart Dubai agenda in 2014, the city has seen the implementation of numerous programs and technology aimed at improving people's daily life.

In this regard, Samaa and Khadeegha (2019) explored electronic portfolio practices among K-12 teachers as well as their perceptions, attitudes, and skills concerning the potential of e-portfolios to increase necessary 21st-century competences. The use of e-portfolios by teachers in both the public and private sectors in the UAE's seven Emirates was researched using both qualitative and quantitative methodologies. According to their survey, the majority of teachers in the field require knowledge, associated skills, and competencies to cultivate and improve reflective, selective, organizational, and constructive feedback skills, as well as familiarity and proficiency with online collaborative and professional networking tools. The UAE is modernizing its educational system to incorporate a wide range of emerging technology, from artificial intelligence to e-books and robotics. As the Fourth Industrial Revolution continues to transform the globe, educators are adjusting their curricula to guarantee that students are equipped for future professions. Technology can make it easier for pupils to grasp and apply content. AI, blockchain, and robotics are paving the path for the UAE to become a global leader in local innovation. Introducing cutting-edge technology into UAE classrooms now ensures that future concerns are addressed early in students' understanding of the innovation life cycle. Table-1

  

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summarizes the UAE initiative in digital transformation by indicating the status of digital transformation in UAE educational institutions.

**Table 1. The findings of digital transformation in the UAE education context**

| Authors | Findings |
|---|---|
| Marks et al., 2021 | The challenge facing digital transformation in UAE higher education is the lack of a vision, digital transformation competency, and data structure were among the leading challenges in digital transformation |
| Al-Ali & Marks, 2022 | There is a gap between digital transformation's maturity perception, and core requirements. Digital transformation in higher education, especially after COVID-19, is seen as inevitable. |
| Bettayeb & Al Marri, 2021 | The alignment of team integration and successful digital transformation in the UAE higher education sector. |
| Alyammahi, 2019 | Artificial intelligence is the enabler for many elements in this transforming economy hence it is expected to play a significant role in the paradigm shift in education |
| Kippels & Ridge, 2019 | To achieve growth and transformation of K–12 Education in the UAE, the country should adopt innovations in education in the areas of technology. |
| Alaleeli & Alnajjar, 2020 | Arab students had a lower frequency of engagement with digital equipment and information systems for learning purposes |

The review of the literature reveals that lots of studies have been conducted on the topic of digital transformation in the UAE's higher education sector. While few studies examined the impact of digital transformation on the education quality of primary schools. One of these studies is the one conducted by Alyammahi (2019) to investigate whether a digital transformation through the Alef platform enhances student performance at the Al Asayel School by measuring students' motivation, engagement, and performance. To align with the UAE Vision 2021 and to answer the call for digital transformations in public schools, this study will investigate how digital transformation has contributed to the development of education quality and school

  

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management in UAE primary schools through digital learning programs that support teaching and learning using advanced technology. In this regard, studying the status of Arab digital generation reveals that schools need to stimulate greater positive engagement of the students in a digital economy and by extension, the entirety of the UAE society (Alaleeli & Alnajjar, 2020). In brief, the existing literature is limited to providing empirical evidence for the linked phenomenon of digital transformation to reinforce education quality. Despite there are lots of studies on digital transformation in many countries around the world and including various industries and businesses, limited research has been done in UAE, especially in the primary school level. This gap in research on digital transformation in UAE's primary schools is concerning as it hinders the understanding of the impact and effectiveness of integrating technology in education at an early stage. Further research in this area is crucial to identify the challenges, benefits, and best practices of implementing digital tools and resources in UAE's primary education system. By conducting comprehensive studies, policymakers and educators can make informed decisions to improve the quality of education and ensure that students are well-prepared for the digital age.

## 4. Literature Review

### 4.1. Digital transformation

Digital transformation is an important part of our day. Digital transformation includes changing the operation of the work based on information technology tools and systems such as internet, big data and smart phones (Parlak, 2017). Producing knowledge as well as gaining knowledge is critical today. The practice of creating and exploiting information appears to be crucial to the development of individuals, companies, and civilizations. The growing production of knowledge and its application in all parts of life necessitates a digital transformation of societies and organizations (Aydın & Ömer, 2018). The phrase "digital transformation" has been defined from several perspectives, for example, Digital transformation, according to the European Commission (2019), is defined by the convergence of current technologies and the integration of physical and digital systems, the dominance of creative business models and new processes, and the development of smart products and services. The OECD (2018) defines digital transformation as the economic and societal repercussions of digitization and digitalization. Digitization is the process of converting analog data and processes into machine-readable formats. The application of digital technology and data, as well as their interplay, to generate new or alter existing activities is referred to as digitalization. As a result of rapidly emerging information and communication technologies, the use of digital tools in educational settings is rising and changing (Parlak, 2017). A digital transformation in education is unavoidable due to the rising usage of technology in everyday life (Taşkiran, 2017). In order to construct our education system, which is still dominated by traditional knowledge, in accordance with contemporary conditions, it is required to develop this change, the digital era, and the ability to

  

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understand and adapt (Parlak, 2017). It is critical to underline how change and transformation should occur in this setting, and it is appropriate to construct the basic framework for our educational system in accordance with the evolving learning profile (Aydın & Ömer, 2018).

Data analytics is one of the needs for digital transformation in education. Learning analytics in education refers to the use of big data to improve learning processes. Analytics have yet to have the impact on education that one might expect given their impact in other disciplines. Regardless, a shift is taking place as educators, researchers, and school principals acknowledge the usefulness of data in refining both learning and education quality, so boosting educational quality and overall competitiveness. Some research communities are developing potential models for enhancing learner performance through the use of predictive analytics, machine learning, and network analysis, as well as tracking concept development through social systems. According to Fosic et al. (2017), the proliferation of digital technology has caused considerable changes in the education business. Digitalization phenomena, like in other industries, assist organizations in recruiting talented people (Dengler & Matthes, 2018), significantly filtering occupational profiles and job descriptions (Conein & Schad-Dankwart, 2019), and achieving digital workplace learning (Harteis, 2019; Ifenthaler, 2018), which is becoming increasingly important in professional teaching and learning. Teachers, trainers, and educational professionals must embrace digital technology not only as an effective administrative and communication tool, but also as a great teaching and learning tool. Digital technology influences knowledge and is commonly utilized as a standalone teaching and learning tool (Gibson & Ifenthaler, 2018). Digital transformation in education should begin with a plan that capitalizes on new technology's opportunities while pursuing the goals of the reference stakeholders (Vahrenhold et al., 2017). The four steps in the digital transformation of education are as follows:

i) Connecting everything to support tomorrow's digital needs; forging strong strategic alliances and constructing an inclusive ecosystem capable of bringing together people, processes, and things to create a cyber-physical network that is both secure and smart.

ii) Using real-life experience and real-time data to drive strategic initiatives that increase performance and spread-out transformations to improve automation and awareness and reduce cost.

iii) Introducing new learning models that take advantage of the Internet space, in which essential services are provided free of charge while only more advanced features and services that are more flexible and easier to manage than traditional systems.

  

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iv) Moving toward a distinct, simple platform, whether on-premises, in the cloud, or a hybrid; the critical purpose of digital transformation is to deliver a single platform as the foundation for a strong network and communications infrastructure.

One of the requirements for digital transformation in education is data analytics. In education, learning analytics refers to the use of big data to improve learning processes. Given their impact in other domains, analytics have yet to have the impact on education that one might expect. Regardless, a shift is underway as educators, researchers, and school principals recognize the value of data in refining both learning and education quality, thereby improving educational quality and overall competitiveness depend on data analytics of digital learning models. Some research communities are developing promising models for improving learner success by utilizing predictive analytics, machine learning, and network analysis, as well as tracking concept development via social systems. In brief, schools, universities, and other educational institutions are becoming increasingly aware of the unexploited potential of digital transformation, which is a process for increasing efficiency and collaboration inside the educational institution while decreasing costs and errors in the management (Claudio et al., 2020). When it comes to utilizing the potential of technology, educational institutions frequently lag behind other industries and the business world. Despite that, there are many bright examples of digital transformation in education (Chang et al., 2017), e.g., virtual classrooms and learning apps are on the rise, and collaborative learning and constant updating of teachers' skills are new developments that have already effected unprecedented changes within a significant portion of the education system (Demartini & Benussi, 2017). In summary, schools, universities, and other educational institutions are becoming increasingly aware of the untapped potential of digital transformation, which is a process for increasing efficiency and collaboration within the educational institution while decreasing costs and management errors (Claudio et al., 2020). When it comes to harnessing the power of technology, educational institutions usually trail other industries and the commercial world. Despite this, there are many shining examples of digital transformation in education (Chang et al., 2017), such as virtual classrooms and learning apps, and collaborative learning and constant updating of teachers' skills, which are new developments that have already effected unprecedented changes within a significant portion of the education system (Demartini & Benussi, 2017).

### 4.2. Education quality

Education is critical to a nation's progress; therefore, education cannot be overlooked or neglected from national development plan of any country (Nurjanah & Sofiawati, 2019). ISO 9000/2015 defines quality as the degree to which a set of inherent characteristics in an object (product, service, process, person, organization, system, or resource) complies with an individual’s needs or expectations (Icontec, 2005). When the educational context is added to a

  

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service like the one delivered by schools or universities, the quality is an essential factor for the success of these institutions. In fact, there is no consensus between authors relating to the scope of the concept, resulting in different definitions of what quality in education is and/or implies (Sverdlick, 2012). According to Usman (2013), quality in education comprises the quality of inputs, procedures, outputs, and results. Where instructional input is judged to be of high learning material quality. A high-quality education process can help schools develop their capabilities (for example, active, creative, pleasurable, and meaningful learning). If pupils' learning outcomes are high, it means they received a good level of education. If individuals have quickly integrated learning materials into their careers and are paid fairly, the educational outcome is called great. In other words, quality benefits schools by: (1) increasing schools' accountability to the community and/or government that has provided all resources to them; (2) ensuring the quality of their graduates; (3) working more professionally; and (4) increasing workforce skills. Education and science are critical to a country's civilization. As a result, nations must promote educational quality in order to have a large number of qualified people for the market and various industries. This fact emphasizes the need of high-quality education. Education outcomes, educational content, the educational process, educational assessment, educational facilities and infrastructure, educational funding, education management, and, most importantly, educators (i.e., teachers) in schools are inextricably linked (Sujanto, 2018). According to some authors, the quality of education in any country is judged by the number of educational institutions, standardized exam scores, and conformance with international norms (Tikly, 2011).

The value of high-quality education in achieving sustainable development is gaining traction among researchers and nations (UNESCO, 2017). Nonetheless, despite the fact that education has become a major problem for nations and that numerous attempts have been made to improve its quality, there is still a long way to go in order to reach the United Nations Development Program's (UNDP) educational targets (UNDP, 2017). To increase educational quality, the school principal should work with all stakeholders, including the school committee and sensory input. As part of the program to increase educational quality, the assistant principal of curricular areas must give more attention to studying and understanding the curriculum objectives (Sukadari et al., 2021). In summary, a high-quality education provides all students with the skills necessary to become economically productive, create sustainable livelihoods, contribute to peaceful and democratic societies, and increase individual well-being. A great school provides a clean, well-organized learning environment. One excellent method for promoting greater learning at school is to provide students with a clean and well-organized environment in which to improve their skills and knowledge. Schools promote educational quality through the upkeep of facilities, teaching quality, and extracurricular activities. Furthermore, instructors can improve educational quality by conducting meaningful evaluations of students' academic performance,

  

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providing constructive feedback/suggestions, providing meaningful professional development, adequate resources, a mentor, and establishing ongoing, open communication.

**5. The relationship between digital transformation and education quality**

Digital transformation has the potential to significantly impact the quality of education. With the integration of technology in classrooms, students can access a vast amount of information, engage in interactive learning experiences, and develop essential digital skills. This transformation enables educators to personalize instruction, adapt to individual learning styles, and provide real-time feedback, leading to improved academic outcomes. Furthermore, digital tools and platforms facilitate collaboration among students, fostering teamwork and enhancing critical thinking abilities. A pressing issue in modern education is the system's modernization, which must adapt to the demands of the digital economy (Ngọc, 2022). The digital transformation of teacher education is an important aspect of the education system's modernization, which necessitates the development of mechanisms for its digital transformation (Voronin et al., 2020). From an administrative standpoint, educational institutions have leveraged the use of technology to enable flexibility in learning and just-in-time training for learners in efforts to improve both internal course delivery processes and education quality provisions (Tay et al., 2017). In this setting, educational institutions that are capable of recruiting more and better students, increasing the experience of courses, teaching materials, and the training process in general must embrace digitalization (Abad-Segura et al., 2020). The Fourth Industrial Revolution (4IR) brings with it, and compels, a digital transformation in all aspects, which institutions must deal with. Applying digital transformation concepts to the educational domain is a new subject that has sparked interest recently (Benavides et al., 2020). It is evident that digital transformation has a significant impact on the quality of education in every school adopted information technology systems in its educational courses. As a result, the governments should propose policies and mechanisms for schools for moving of some aspects of education online and promoting the adoption of the 4IR (Mhlanga & Moloi, 2020).

Today digital networks also facilitate many-to-many or peer-to-peer education. People could learn by using social media platforms like Facebook, YouTube, and Flickr, as well as multiplayer gaming environments. Social media, particularly gaming settings, provide platforms for intellectual discovery, idea exchange, and collaborative project development. Students can gain valuable input from their peers through social media, and they can learn skills by working together to construct things. Moreover, students using these media are not need to be in the same geographic location (Balkin, 2016). Today, it is clear that digital transformation necessitates new techniques for implementing processes utilizing modern technologies of interaction, control, and communication of students (Maslevich et al., 2021). Digital change is like a powerful tsunami, the advent of digitalization in many industries and businesses creates new relationships and

  

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dramatically changes the marketing landscape of national education systems (Crittenden, et al., 2019). By adopting digital transformation, teachers empower students by enhancing sensory observations and enhancing digital activities, leading to more learning and improve education quality (Gapsalamov et al., 2020). Khalid et al. (2018) argued that digital transformation will require all participants in this process (e.g., school principals, teachers, ministry of education) to comprehensively rethink their educational model and bridging between digital transformation and educational models in order to strengthen education quality (Grewal et.al., 2019; Espino-Díaz et al., 2020; Wilcox, 2020; Swarts, 2020). Orellana et al. (2019) suggested that helping universities in adopting digital transformation will enhance their education process and improve education quality. In the same context, Igoshin et al. (2020) discovered that the quality models employed had their own urge for digital conversion, and digital conversion drivers were established to provide advice on the inclusion of digital features in every quality criterion that stimulates digital conversion in universities. Based on the aforementioned findings and reports, it is evident that it is crucial for school in UAE to prioritize comprehensive reforms based on digital transformation that focus on improving education quality and ultimately ensuring that every pupil receives a solid educational foundation, doing so with help administrations in schools to tackle this issues that accompany the learning process.

## 6. Conclusions

The review of literature reveals lots of evidences and reports the confirm the impacts of digital transformation on education quality and the substantial advantages behind implementing digital tools and system in classes, e.g., schools may collect and analyze a variety of data on their pupils using digital technology in order to monitor and improve their academic performance and achievements. Hence, students that use a digital education platform become more engaged and expand their knowledge. Furthermore, digital learning is more engaging than traditional one-sided teachers. To that end, schools can use traditional and advanced analytics using digital tools to understand where students struggle and succeed in order to rectify the learning process, introduce new approaches, and assess student achievement with high accuracy. In sum, to improve education quality through digital transformation, Abu Dhabi primary schools should consider several recommendations, such as investing in the necessary infrastructure and technology to ensure a seamless integration of digital tools and resources into the classroom. This includes providing high-speed internet access, modern devices such as laptops or tablets, and interactive digital learning platforms. Additionally, schools should prioritize training and professional development programs for teachers to enhance their digital literacy skills and ensure they can effectively utilize these tools in their teaching practices. In other sense, fostering a culture of innovation and collaboration among educators can greatly contribute to the successful implementation of digital transformation initiatives.

  

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**References**

Abad-Segura, E., González-Zamar, M. D., Infante-Moro, J. C., & Ruipérez García, G. (2020). Sustainable management of digital transformation in higher education: Global research trends. Sustainability, 12(5), 2107.

Al Ali, M., Mazheruddin, M., Naismith, L., & Testa, S. (2019). TIMSS 2019 Encyclopedia Dubai, UAE. https://timssandpirls.bc.edu/timss2019/encyclopedia/pdf/Dubai%20UAE.pdf

Alaleeli, S., & Alnajjar, A. (2020). The arab digital generation's engagement with technology: The case of high school students in the UAE. Journal of Technology and Science Education, 10(1), 159-178.

Al-Ali, M., & Marks, A. (2022). A digital maturity model for the education enterprise. Perspectives: Policy and Practice in Higher Education, 26(2), 47-58.

Alyammahi, A. H. (2019). The impact of Alef Platform on students' performance at Al Asayel School in Abu Dhabi, UAE. Journal for Researching Education Practice and Theory, 2(1), 80-108.

Aydın, B., & Ömer, Ö. (2018). Academicians' Views on Digital Transformation in Education. International Online Journal of Education and Teaching, 5(4), 809-830.

Balkin, J. M., & Sonnevend, J. (2016). The digital transformation of education. Education and Social Media: Toward a Digital Future. MIT Press.

Balyer, A., & Ömer Ö. (2018). Academicians' views on digital transformation in education. International Online Journal of Education and Teaching (IOJET), 5(4), 809-830.

Benavides, L. M. C., Tamayo Arias, J. A., Arango Serna, M. D., Branch Bedoya, J. W., & Burgos, D. (2020). Digital transformation in higher education institutions: A systematic literature review. Sensors, 20(11), 3291.

Bettayeb, A., & Al Marri, K. (2021, August). Does Team Integration Effect the Successful Implementation of Digital Transformation? In The 7th Annual International Conference on Arab Women in Computing in Conjunction with the 2nd Forum of Women in Research (pp. 1-5).

Burns M. (2018). Digital Transformation in The Education Industry: 5 Trends. (2018). [Online]. Available: https://www.digitalistmag.com/future-of-work/2018/05/10/

  

ISSN: 2455-8834

Volume:09, Issue: 12 "December 2024"

Chang, C. K., Reisman, S., & Tovar, E. (2017). Advances in learning technologies. (Long. Beach. Calif), Computer, 50(50, 14-17.

Claudio, G. D., Lorenzo, B., Valentina, G., & Flavio, R. (2020). Education and digital transformation: The "reconnection" project. IEEE Access, 8, 186233-186256.

Conein, S., & Schad-Dankwart, I. (2019). Similar and yet different – Digitalization and its consequences for individual occupational profiles. A comparison between industrial clerks and process mechanics. Vocational Training in Research and Practice – BWP, 3, 48–52. https://www.bwp-zeitschrift.de/en/bwp.php/de/bwp/show/10125.

Crittenden, W. F., Biel, I. K., & Lovely, W. A. (2019). Embracing digitalization: Student learning and new technologies. Journal of Marketing Education, 41(1), 5-14.

Demartini, C., & Benussi, L. (2017). Do Web 4.0 and industry 4.0 imply education X.0? IT Prof., 19(3), 4-7.

Dengler, K., & Matthes, B. (2018). The impacts of digital transformation on the labor market: Substitution potentials of occupations in Germany. Technological Forecasting and Social Change, 137, 304–316.

Espino-Díaz, L., Fernandez-Caminero, G., Hernandez-Lloret, C. M., Gonzalez-Gonzalez, H., & Alvarez-Castillo, J. L. (2020). Analyzing the impact of COVID-19 on education professionals. Toward a paradigm shift: ICT and neuroeducation as a binomial of action. Sustainability, 12(14), 5646.

European Commission. (2019). Digital transformation. Retrieved from https://ec.europa.eu/growth/industry/policy/digitaltransformation_en.

Fermin, N., Mónica, C., Emeterio, R., & Mario A. (2020). The strategic influence of school principal leadership in the digital transformation of schools. Computers in Human Behavior, 112(2).

Fosic, I., Trusic, A., & Sebalj, D. (2017). Digital Organizational Strategy-Ticket for competitiveness on the international market. Strategic Management, 22, 3–10.

Fredreric, L., Lisandro, Z. G., Márcio, N. M., Vanina, D., & Márcia, P. (2021). ICT Education: Research on the Use of Technologies of Information and Communication in Brazilian Schools: Survey on the Use of Information and Communication Technologies in Brazilian Schools. Brazilian Internet Steering Committee Available online

  

ISSN: 2455-8834

Volume:09, Issue: 12 "December 2024"

[https://www.cgi.br/media/docs/publicacoes/2/20211124200326/tic_educacao_2020_livro_eletronico.pdf#page=249].

Gaad, E., Arif, M., & Scott, F. (2006). Systems analysis of the UAE education system. International Journal of educational management.

Gapsalamov, A., Bochkareva, T., Vasilev, V., Akhmetshin, E., & Anisimova, T. (2020). Comparative analysis of education quality and the level of competitiveness of leader countries under digitalization conditions. Journal of Social Studies Education Research, 11(2), 133-150.

Gibson, D. C., & Ifenthaler, D. (2018). Analyzing performance in authentic digital scenarios. In T.-W. Chang, R. Huang, & Kinshuk (Eds.), Authentic learning through advances in technologies. New York: Springer, 17–27.

Grewal, I., Maher, A., Watters, H., Clemens, D., & Webb, K. (2019). Rewriting Teacher Education: Food, Love, and Community. Journal of Culture and Values in Education, 2(3), 44-60.

Harteis, C. (2019). Supporting learning at work in an era of digitalization of work. In A. Bahl & A. Dietzen (Eds.), Work-based learning as a pathway to competence-based education. A UNEVOC network contribution. Leverkusen: Barbara Budrich, 85–97.

Icontec. (2005). Norma técnica Ntc-Iso colombiana 9000 - 2005, 45. http://www.ceicmo.com/resources/documents/NTC_ISO_9000-2005.pdf.

Ifenthaler, D. (2018). How we learn at the digital workplace. In D. Ifenthaler (Ed.), Digital workplace learning. Bridging formal and informal learning with digital technologies. Cham: Springer, 3-8.

Igoshin, V. I., Fedchenko, E. A., Denisova, O. P., Akhmetov, L. G., Plaskova, N. S., & Prokofeva, E. V. (2020). To the question of the method of studying the concept of proof and the axiomatic method by bachelors and masters of pedagogical education. International Journal of Advanced Science and Technology, 29(6), 1964-1972.

Khalid, J., Ram, B. R., Soliman, M., Ali, A. J., Khaleel, M., & Islam, M. S. (2018). Promising digital university: A pivotal need for higher education transformation. International Journal of Management in Education, 12(3), 264-275.

Kippels, S., & Ridge, N. (2019). The growth and transformation of K–12 educations in the UAE. In Education in the United Arab Emirates. Springer, Singapore, 37-55.

  

ISSN: 2455-8834

Volume:09, Issue: 12 "December 2024"

Makridakis, S. (2017). The forthcoming Artificial Intelligence (AI) revolution: Its impact on society and firms. Futures, 90, 46–60.

Marks, A., Al-Ali, M., Atassi, R., Elkishk, A. A., & Rezgui, Y. (2021, February). Digital transformation in higher education: maturity and challenges post COVID-19. In International Conference on Information Technology & Systems. Springer, Cham, 53-70.

Marquez, J., Lambert, L., Ridge, N. Y., & Walker, S. (2022). The PISA performance gap between national and expatriate students in the United Arab Emirates. Journal of Research in International Education, 21(1), 22-45.

Maslevich, T. P., Polomoshnov, P. A., Lipchanskaya, I. V., & Zhukovsky, D. A. (2021, November). Innovative Approaches to the Educational Processes in Higher School in the Context of Digital Transformation. In International Scientific and Practical Conference Operations and Project management: strategies and trends. Springer, Cham, 711-716

Mhlanga, D., & Moloi, T. (2020). COVID-19 and the digital transformation of education: What are we learning on 4IR in South Africa? Education sciences, 10(7), 180.

Ngọc, T. V. (2022). Measures to manage the application of information and communication technology in teaching in high schools in don Duong district, Lam Dong province to meet the educational digital transformation era. Journal of Ethnic Minorities Research, 11(1).

Nurjanah, E., & Sofiawati, E. T. (2019). Implementation of Education Quality Improvement in Primary Schools Judging from Teacher Competency Test in Sukabumi Regency. International Journal for Educational and Vocational Studies, 1(7), 773-776.

OECD. (2015). Students, computers and learning: Making the connection. https://doi.org/10.1787/ 9789264239555-en.

OECD. (2018). Going digital in a multilateral world. Retrieved from https://www.oecd.org/going-digital/C-MIN-2018-6-EN.pdf

Orellana, V., Cevallos, Y., Tello-Oquendo, L., Inca, D., Palacios, C., & Renteria, L. (2019). Quality evaluation processes and its impulse to digital transformation in Ecuadorian universities. Paper presented at the 2019 6th International Conference on e-Democracy and e-Government, ICEDEG 2019, 338-343

Parlak, B. (2017). Education in Digital Age: An analysis on opportunities and practices [Education in Digital Age: An analysis on opportunities and practices], Süleyman

  

ISSN: 2455-8834

Volume:09, Issue: 12 "December 2024"

Demirel University. Journal of Faculty of Economics and Administrative Sciences, 22(15), 1741-1759.

Parviainen, P., Tihinen, M., Kääriäinen, J., & Teppola, S. (2017). Tackling the digitalization challenge: How to benefit from digitalization in practice. International Journal of Information Systems and Project Management, 5(1), 63-77

Samaa, A. G., & Khadeegha, A. (2019). Exploring teacher perceptions of using e-portfolios in public schools in the United Arab Emirates. International Journal of Education and Literacy Studies, 7(4), 180-191.

Sujanto, B. (2018). School Management: Problems and Solutions. Jakarta: Earth Literacy.

Sukadari, M. H., Perianto, E., & Haryanto, E. S. (2021). Improving education quality of primary school in Indonesia: empirical research. Journal of Southwest Jiaotong University, 56(4).

Sverdlick, I. (2012). What's new in educational evaluation? Buenos Aires: Noveduc. ISBN: 978 987 538 339 5.

Swarts, G. (2020). Re/coding Global Citizenship: How Information and Communication Technologies have Altered Humanit. and Created New Questions for Global Citizenship Education. Research in Social Sciences and Technology, 5(1), 70-85.

Tabroni, I., & Ismiati, I. (2021). School management strategies in improving the quality of education with leading programs based on Islamic boarding schools. SOKO GURU: Educational Scientific Journal, 1(3), 01-04.

Taha Thomure, H. (2019). Arabic language education in the UAE: Choosing the right drivers. In Education in the United Arab Emirates (pp.). Springer, Singapore, 75-93

Taşkiran, A. (2017). Higher education in the digital age. Journal of Open Education Practice and Research, 3(1), 96-109.

Tay, H. L., & Low, S. W. K. (2017). Digitalization of learning resources in a HEI—A lean management perspective. International Journal Prod. Perform. Management., 66, 680–694.

Tikly, L. (2011). Towards a framework for researching the quality of education in low-income countries. Comparative education, 47, 1, 1-23.

UNDP. (2017). Sustainable development goals. Objective 4, Quality education.

  

ISSN: 2455-8834

Volume:09, Issue: 12 "December 2024"

UNESCO. (2017). Education for the 21st century. https://es.unesco.org/themes/education-21st-century

Usman, H. (2013). Management Theory, Practice, and Educational Research. Jakarta: Bumi Aksara.

Vahrenhold, J., Nardelli, E., Pereira, C., Berry, G., Caspersen, M., Gal-Ezer, J., K'olling, M., McGettrick, A. & Westermeier, M. (2017). Informatics education in Europe: Are we all in the same boat,'' ACM/Inform. Eur., New York, NY, USA, Tech. Rep.

Voronin, D. M., Saienko, V. G., & Tolchieva, H. V. (2020, May). Digital transformation of pedagogical education at the university. In Proceedings of the International Scientific Conference Digitalization of Education: History, Trends and Prospects (DETP 2020), 437, 757-763.

Wilcox, S. (2020). Policy Storms at the Central Office: Conflicting Narratives of Racial Equity and Segregation at School Committee Meetings. Research in Educational Policy and Management, 2(1), 40-56

World Bank. (2014). The Road Traveled: Dubai's journey towards improving private education. MENA Development Report. Retrieved from https://documents.worldbank.org/en/publication/documentsreports/documentdetail/578491468172474244/the-road-traveled-dubais-journey-towards-improving-privateeducation-a-world-bank-review

  