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Transformation of Cultural Arts Education in Indonesia: Combining Technological Innovation and Adaptability in the Era of Globalisation

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Abstract: This research explores the transformation of arts and culture education in Indonesia in the face of challenges and opportunities brought about by globalisation and technological advancement. The main focus is on the integration of technology in arts education as a catalyst for pedagogical innovation. A qualitative descriptive method was used, with a sample that included schools, education experts, art teachers, and students. Data were collected through interviews, case studies, document analysis, and observation. The results showed that cultural arts education in Indonesia requires a transformation that involves not only the use of technology, but also the adaptability of curricula and teaching methodologies that are responsive to global needs and trends. The integration of technology has been shown to increase student engagement and participation, as well as providing them with opportunities to explore arts and culture in more interactive and innovative ways.

Keywords: art education transformation; technological innovation; global

Abstrak: Penelitian ini mengeksplorasi transformasi pendidikan seni budaya di Indonesia dalam menghadapi tantangan dan peluang yang dibawa oleh globalisasi dan kemajuan teknologi. Fokus utama adalah pada integrasi teknologi dalam pendidikan seni sebagai katalis untuk inovasi pedagogis. Metode deskriptif kualitatif digunakan, dengan sampel yang meliputi sekolah-sekolah, ahli pendidikan, guru seni, dan siswa. Data dikumpulkan melalui wawancara, studi kasus, analisis dokumen, dan observasi. Hasil penelitian menunjukkan bahwa pendidikan seni budaya di Indonesia memerlukan transformasi yang tidak hanya melibatkan penggunaan teknologi, tetapi juga adaptabilitas kurikulum dan metodologi pengajaran yang responsif terhadap kebutuhan dan tren global. Integrasi teknologi telah terbukti meningkatkan keterlibatan dan partisipasi siswa, serta memberikan mereka kesempatan untuk mengeksplorasi seni dan budaya dalam cara yang lebih interaktif dan inovatif.

Kata kunci: transformasi pendidikan seni; inovasi teknologi; global

INTRODUCTION

The current trend in education is towards the effective use of technology to prepare young people for future careers. (Curda, 2020). Therefore, many experts and policymakers are trying to implement STEM (science, technology, engineering, and mathematics) education, with the modern philosophy of the "industrial" model of education recognised as an important component in future economic contribution (Agussuryani et al., 2022; Fernández-Morante et al., 2022). On the other hand, these fields require a creative approach to provide an ultimately complementary dimension, that of the arts discipline. As a field of study, the arts are often recognised as a means for creativity, innovation, and risk-taking management (Graham, 1997). However, many teachers teach the arts in a mainstream, linear and formulaic way that lacks creativity, innovation and is not unlike the pedagogical models found in maths, science and language (Prastowo, 2011).

Many teachers, for example, follow a classical or conventional mode of instruction. This rigid pedagogical style fosters and nurtures obedience and dependence, rather than empowerment and independence, which are the hallmarks of arts education (Freire, 1970; White et al., 2018). Empowerment and independence can be developed through the teaching of art improvisation and/or art composition, which falls within the scope of creativity, innovation and critical thinking.

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Ironically, this classical or conventional mode of instruction enforces an approach to art education that is not multicultural, multi-interpretative and multidisciplinary.

On the other hand, arts education should be affiliated with conservative, conventional and conformist practices that are detrimental to students' ability to think critically, creatively and innovatively (Sampurno, 2018). This conservatism, conventionality and conformity is reinforced by the common curriculum in most countries, which is compartmentalised according to subject matter (literacy, STEM, social sciences humanities and arts), atomised regarding pedagogical delivery, organised and formatted by grade level, and correlated with standardised evaluation systems across schools (Maryani et al., 2022; Novaliendry et al., 2022). This is because arts and culture education in Indonesia has reached a critical point in facing the challenges and opportunities brought about by globalisation. Globalisation, with all its complexities, has had a significant impact on the way society perceives and consumes arts and culture, triggering a profound shift in the approach to arts education (Khondker, 2004; Muzaffar & Otero-Pailos, 2015). These factors require a transformation in cultural arts education to maintain its relevance and ensure that Indonesia's cultural heritage remains alive and thriving.

The context and need for this transformation stems not only from changes in cultural consumption patterns but also from shifts in population demographics and technological developments (Demartini et al., 2020). The acceptance of foreign cultures and the integration of technology have changed the landscape of education and cultural arts, fuelling the need to blend technological innovation with greater adaptability. These changes not only pose challenges but also offer unique opportunities to revitalise and modernise cultural arts education, which in turn will help in maintaining and advancing Indonesia's cultural heritage.

In the global context, many countries have faced similar challenges and have responded in different ways (Kim & Lee, 2018; Kringelbach & Skinner, 2012; V. Roudometof, 2016). Case studies from countries such as Japan and South Korea, for example, provide insights into how technology integration in arts education can be successfully carried out, utilising technology to enrich the learning and teaching experience (Hyunshik Ju & Oh, 2023; Udjaja et al., 2019). In Europe, many countries have shown how they are preserving their cultural heritage while still adapting to global change (V. Roudometof, 2016), offers a valuable model for Indonesia in maintaining its cultural identity amidst globalisation.

Technology, which has transformed almost all aspects of life, including the way we learn and teach, has untapped potential in cultural arts education. The use of tools such as virtual reality, social media, and online learning platforms, for example, can significantly increase student engagement and participation in cultural arts learning (Wiratmoko & Sampurno, 2021). This technology offers a way to create a more interactive and immersive learning experience, which not only enhances students' understanding of cultural arts but also appeals to the younger generation who are more familiar with digital media and interactive technology (Al Hashimi et al., 2019; Strycker, 2020). This potential opens up new opportunities for a more dynamic and engaging cultural arts education, which can be more appealing to students in the digital age.

While there are many studies on technology integration in education in general, there is still a significant gap in the literature that specifically addresses the use of technology in cultural arts education in Indonesia. This research, then, aims to fill that gap, with a particular focus on how technology can be used to sustain and develop Indonesian cultural arts in a changing global context. This is important because, while the use of technology in education has been widely explored in many contexts, its specific application in the context of cultural arts education in Indonesia - a country with a rich and diverse culture - has not been studied in depth.

METHOD

This research uses a descriptive qualitative approach that aims to understand and interpret the phenomenon of transformation of cultural arts education in Indonesia in the context of

globalisation. This approach allowed the researcher to collect in-depth data on practices and perceptions related to the integration of technology in cultural arts education, as well as explore how adaptability and innovation are applied in the current Indonesian educational environment. The research sample was purposively selected to include schools that have implemented technology in cultural arts education, as well as education experts, arts teachers and students. (Sugiyono, 2011). The sample was selected based on criteria such as diversity of approaches to integrating technology, uniqueness of art teaching methods and successful implementation of innovations in the curriculum. The purpose of selecting this sample was to gain a comprehensive view of the different strategies used and their effectiveness in the context of cultural arts education in Indonesia.

Data collection in this study was conducted through various methods to ensure depth and richness of information. Interviews were conducted with education experts, art teachers and students to elicit their views on the role of technology in art education and its influence on the learning process. These interviews were semi-structured, allowing subjects to freely explore and express their views. This research also utilises case studies from schools that have successfully integrated technology in their arts and culture curriculum. Through case studies, this research can provide practical examples of the application and impact of technology in art teaching. Furthermore, this research also incorporates document analysis, including school curricula, learning materials and educational policies, to understand the formal framework of cultural arts education and the role of technology in it. Observations were conducted in several art classes in the schools involved, providing first-hand insights into the interactions between students, teachers and technology in the context of art education.

Data collected from interviews, case studies, document analysis, and observation will be analysed using thematic content analysis (Miles et al., 2018). This involves systematically coding the data to identify key themes, patterns and trends relating to the use of technology in cultural arts education. The researcher will scrutinise the data to understand how technology affects arts learning, innovative ways of teaching it, and the challenges and opportunities that arise from this integration of technology. This analytical process will enable the research to generate an in-depth understanding of the transformational dynamics of arts and culture education in Indonesia in the era of globalisation.

RESULT AND DISCUSSION

As modern education tends to dominate, STEM (Science, Technology, Engineering and Maths) has become a major focus, supported by governments and various walks of life. Its effectiveness in honing technical and scientific skills provides students with the necessary models for success in the digital age (Kosnik et al., 2016). Global trends emphasise the importance of technological innovation and career readiness in STEM fields as key to future economic prosperity. However, as Barone and Eisner pointed out in 2002, this focus often overlooks the cultural arts, which, despite their critical role in the development of creative thinking and expression, are often overlooked or undervalued in STEM-orientated curricula (Barone & Eisner, 2012). The role of the arts in developing creativity, innovation and risk management should not be underestimated. The arts, in their various forms, promote critical thinking, problem-solving skills, and the ability to think abstractly and metaphorically. A study by Putz-Plecko shows that arts education improves not only academic achievement but also social skills (Putz-Plecko, 2015). However, arts education in many Indonesian schools is often run in a conventional and formulaic manner, not utilising the full potential of the arts in encouraging creativity and innovation (Wiratmoko & Sampurno, 2021).

The transformation of cultural arts education in Indonesia, especially in incorporating technological innovation and adaptability in the era of globalisation, is a complex and multifaceted topic. Exploration of technology integration can improve the quality of cultural arts

education, while identifying the challenges and opportunities that exist. Drawing on educational theories, global perspectives, and corroborating references, this discussion aims to provide scholarly insights into the subject. Technology, as an effective tool for teaching and learning, offers the potential to revolutionise cultural arts education (Table 1). According to Jenkins, digital media and interactive technologies can increase student participation and promote collaborative learning (Jenkins, 2021).

Table 1. Application of Technology in Cultural Arts Education

Technology Category	**Technology Description**	**Application in Cultural Arts Education**	**Case Study / Real Example**	**Impact/Outcome**
Digital Learning Platform	Online software or applications for learning.	Use for virtual art classes, access art subject matter.	Al Hashimi, 2020; Datlen & Pandolfi, 2020; Wiratmoko & Sampurno, 2021; Yazici & Özerbaş, 2021	Increased access and flexibility of learning.
Visualisation and Design Tools	Tools such as graphic software and 3D design.	Used to teach graphic design techniques, digital art.	Afnan et al., 2021; Deliyannis, 2007; Lytridis et al., 2018	Increased student creativity and technical skills.
Social Media and Digital Marketing	Use of social media for promotion and interaction.	Used to promote student artwork, interaction with the art community.	Akcaoglu & Bowman, 2016; Gamero et al., 2021; Ross, 2017	Increased participation and visibility of student artwork.
Augmented Reality (AR) / Virtual Reality (VR) Technology	Immersive technology for art experiences.	Utilisation for art exploration in a virtual environment.	Alam & Mohanty, 2023; Ip et al., 2017; King et al., 2019; Lee et al., 2021; Rong et al., 2022; Wang et al., 2019	A more immersive and interactive art experience.
Learning Management System (LMS)	Online platform for course and material management.	Used to manage classes, assignments, and course materials.	Gaganao et al., 2022; Hosseini, 2018; Shengnan & Hallinger, 2021	Better efficiency and organisation of learning.

From Table 1 above, arts and culture education in Indonesia is currently at a crossroads, where the challenges of globalisation and technological advances require a transformation in teaching approaches and curriculum (Table 1). This transformation is important to ensure that cultural arts education is not only relevant, but also able to empower learners in the face of changing times.

Discussion

Transformation in arts and culture education in Indonesia is crucial in this era of globalisation. This change must go beyond mere integration of technology in arts education; it is about how arts education is delivered and perceived in society. Technology in arts education can overcome traditional boundaries and open new avenues for artistic expression and creativity, yet it is not only a tool, but also a catalyst for pedagogical innovation in arts education (Paniagua & Istance, 2018). The importance of balancing STEM and arts education in the education system cannot be overlooked. This imbalance often results in incomplete educational outputs, where students may have technical skills but lack in creativity and innovative thinking. Education should stimulate creativity and innovation as much as factual and technical knowledge (*Pendidikan Seni Budaya Tidak Boleh Dimarginalkan*, 2019). Therefore, arts education should be considered an important component that goes hand in hand with STEM education. The integration of technology in arts education has opened up new opportunities in arts teaching and learning. The use of digital technologies, such as virtual reality (VR) and augmented reality (AR), can create more interactive and immersive learning experiences (Steffen et al., 2019). Technology in art can increase student engagement and provide them with new tools for creative expression and allow students to experiment with new media and understand art in a contemporary context.

Firstly, the integration of technology in cultural arts education can open up new opportunities in the learning process. The use of digital tools, such as design software, music learning apps and virtual art platforms, allows learners to explore different aspects of art and culture in a more interactive and innovative way. These technologies also facilitate access to learning resources from around the world, thus broadening learners' horizons about the diversity of global arts and cultures. Secondly, curriculum adaptability is a crucial aspect in the era of globalisation. The cultural arts education curriculum must be able to adapt to changing trends and community needs. This means that the curriculum must be flexible and inclusive, accommodating various forms of artistic expression. In addition, it is important to include aspects of local wisdom and the diversity of Indonesian culture, so that art education is not only a medium to appreciate art globally, but also as a means to preserve and promote local culture. Thirdly, teaching methods must be continuously updated and adapted to the times. Learner-centred learning approaches, such as project-based and collaborative learning, can increase learner engagement and creativity. Teachers should also be able to use technology as a tool to make the subject matter more interesting and easy to understand. Fourth, the link between arts and culture education and the creative industry sector needs to be strengthened. Arts education should be able to provide skills that are relevant to industry needs, such as creativity, critical thinking and collaborative abilities. This will prepare learners not only as art appreciators, but also as creative industry players who are ready to contribute to the creative economy.

By understanding the complexity and multifaceted nature of this topic, and integrating the perspectives that have been presented, this discussion aims to provide a deep and balanced insight. Through a holistic and adaptive approach, arts and culture education in Indonesia can face the challenges of globalisation and technology, while maintaining the essence and richness of local culture. Therefore, cultural arts education not only forms individuals who are able to appreciate beauty and artistic expression, but also gives birth to a generation that is ready to innovate and contribute creatively in a dynamic and ever-evolving society.

CONCLUSION AND SUGGESTIONS

This research highlights the need for a transformation of cultural arts education in Indonesia that is responsive to globalisation and technological advances. The integration of technology in arts education has opened up new opportunities in teaching and learning that are more interactive and immersive. Technology is not just a tool, but also a catalyst for pedagogical innovation that allows students to explore various aspects of art and culture in greater depth. The arts education

curriculum should be flexible and inclusive, accommodating various forms of artistic expression as well as incorporating aspects of Indonesian local wisdom. Teaching methods should be updated, utilising learner-centred approaches and using technology to enhance engagement and creativity. In addition, arts education should be linked to the creative industries, preparing learners to contribute to the creative economy. Therefore, arts and culture education in Indonesia should not only aim to appreciate art, but also mould individuals who innovate and contribute creatively in a dynamic society. This transformation is important to ensure that arts and culture education is not only relevant, but also empowers learners in the face of changing times.

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