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Texts and Co-texts of Digital Native Elementary School Art Learning during the Covid-19 Pandemic

Pance Mariati^{a, 1*}, Sri Hatatik^{a, 2}, Suharmono Kasiyun^{a, 3}, Ratih Asmarani^{b, 4}

^aUniversitas Nahdlatul Ulama Surabaya, Indonesia,

^bUniversitas Hasyim Asy'ari Jombang, Indonesia

¹<u>pance_mariati@unusa.ac.id</u>*; ²<u>titax@unusa.ac.id</u>; ³<u>Suharmono@unusa.ac.id</u>; ⁴<u>ratihasmarani0004@gmail.com</u> *korespondensi penulis

Informasiartikel	ABSTRAK
Received :	Penelitian ini bertujuan untuk menjelaskan sintesis perubahan konseptual dalam
June 25, 2021.	pembelajaran seni bagi siswa digital natives untuk merefleksikan praktik
Revised :	pembelajaran seni saat ini sehingga menjadi titik pijak dalam proses peningkatan
August 20, 2021.	ke depannya. Penelitian ini menggunakan pendekatan studi kasus terhadap
Publish :	pembelajaran seni bagi siswa digital natives di 3 sekolah dasaryang berada di
September 21, 2021.	Kabupaten Pacitan selama Mei 2020 hingga Mei 2021 dengan 100 siswa dan 50 guru. Penelitian ini mewacanakan objek material dan formal dalam
Kata kunci:	pembelajaran seni menjadi teks dan ko-teks sebagai pandang dari semiotika
teks dan co-teks	pendidikan ruang kelas yang merupakan upaya sistematisasi berdasarkan elemen
pembelajaran seni	pembelajaran seni bagi digital natives. Hasil penelitian menunjukkan elemen
sekolah dasar	pembelajaran seni sepertihalnya model pembelajaran, aspek keintiman antara
digital natives	guru dan siswa, serta ekosistem pembelajaran yang ada di dalamnya selalu
pandemi Covid-19	berkembang dengan mempertimbangkan unsur entrainment. Dibutuhkan
	integrasi antara elemen pembelajaran untuk memenuhi prasyarat terjadinya
	resiliensi bagi siswa digital natives, antara lain: keintiman antara teks dan co-
	teks pembelajaran, kompetensi teks dan co-teks pembelajaran, dan entrainment
	dalam ekosistem pembelajaran berbasis kelas digital natives.
	ABSTRACT
	This study aims to explain the synthesis of conceptual changes in art learning for
Keywords:	digital natives students to reflect current art learning practices so that they become
text and co-text	a foothold in future improvement. This research uses a case study approach to art
art learning	learning for digital natives students in 3 elementary schools in Pacitan, East Java,
elementary schools	from May 2020 to May 2021 with 100 students and 50 teacher. This research
digital natives	discusses material and formal objects in learning art into text and co-text as a
the Covid-19 pandemic	perspective from educational semiotics classroom, which is an effort to
	systematize based on the elements of art learning for digital natives. The results
	showed that the elements of art learning, such as the learning model, the intimacy
	aspect between teachers and students, and the digital natives learning ecosystem
	in them are continuously developing by considering the element of entrainment.
	Integration between learning elements is needed to meet the prerequisites for
	resilience for digital natives students, including intimacy between text and co-text
	learning, text competence and co-text learning, and entrainment in a learning-
	based ecosystem of digital natives class.
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INTRODUCTION

Currently, art learning discourse has entered the interdisciplinary realm (Darlington & Dake, 2017; Johnston-Goodstar et al., 2014). Before the 2010s, art learning tended to discuss aspects of its usefulness and implications in everyday life (Choi & Piro, 2009). On the other hand, global art learning has discussed beyond and their development towards art learning (Crowder et al., 2020; Gude, 2018; Hudson, 2020). The boundaries of the discussion of art learning are made artificially to enrich scientific knowledge.

Artificial boundaries in the discourse of art learning are in line with the development of generations. The growing generation stimulates developments in other fields, especially education and learning. Art learning discourse also has a sensitivity towards the current generation, which is generally known as the digital generation, concerning the digital generation, Prensky (2001) reminiscent of the term digital natives in students who grow up with technology.

Even since the 2000s, discourse on digital natives has emerged primarily to understand better how to educate these students (Strycker, 2020; Williams, 2017). However, the problem arises because educators sometimes treat digital natives students as someone with digital skills who are considered to have the ability for digital concepts to emerge naturally to be widely accepted.

The common perception of digital natives students raises a dialogue with art learning. Art has an adaptive ability to become a complementary medium in digital learning(Canter, 2012; Choi & Piro, 2009; Goldie & Scellekens, 2007). One reason is the proliferation of new media arts, which are always wrapped in technology in their performances. Therefore, it is not uncommon for teachers to take advantage of the concept of new media art in art learning in the classroom.

The scope of art learning today becomes clearer when juxtaposed with digital natives students. However, the problem arises when its use obscures the concepts of art education. Creativity, soul, and initiative in children's art education are obscured by the efficiency of digital technology(Csikszentmihalyi et al., 2017; Dewantara, 2004). Likewise, with education through art, whose flexibility is widespread and artificial boundaries are not correctly interpreted by teachers(R. M. Patton & Buffington, 2016; Read, 1970).

Based on the explanation above, the purpose of this study is to explain the synthesis of conceptual changes in art learning for digital natives students to reflect current art learning practices and become a foothold in the process of future improvement: material and formal objects in discourse learning in the terms text and co-text. Text and co-text offer a perspective from semiotics which is an effort to systematize based on elements of art learning for digital natives. This systemization begins with the art learning process for digital natives as an element of formation. Therefore, this research breaks down into the main elements of the form (which is also called text) and the elements of supporting formation (which are also called co-texts) about art learning for digital natives.

Metode

This research uses a case study approach with the help of a questionnaire to art learning for digital natives students in 3 elementary schools in Pacitan, East Java, Indonesia, from May 2020 to May 2021 with 100 students and 50 teachers. The position of the questionnaire in case study research helps substitute interviews which are the key to the research method(Tashakkori & Creswell, 2008). This is because this research was conducted during the Covid-19 pandemic so that referring to the concept of mixed research, permission is obtained that the questionnaire can be a supporting instrument in case study research(Creswell, 2010; Tashakkori & Creswell, 2008). The instrument does not have a crucial character but serves as a trigger for studies related to the phenomenon of text and co-text in art learning for digital natives in the era of the Covid-19 pandemic(Sugiyono, 2011). Furthermore, this research discusses material and formal objects in learning art into text and co-text as a perspective from digital natives. The selection of research respondents was random but still under the

researcher's control as the main instrument. After the data was collected, a systematization was carried out starting from the art learning process for digital natives as an element of formation.

Results and Discussion

Learning art during the Covid-19 pandemic provides new experiences for students and teachers alike. This is because the interrelationships have not been neatly established between the digital natives' generation and digital immigrant teachers and students who are natural digital natives. What is more, the Covid-19 pandemic has cornered several positions of parents as facilitators of student education with the need for hardware for online learning. Not all people have smartphones or supporting hardware for online learning (Figure 1). This is undoubtedly an aspect that needs to be underlined and considered for teachers in providing learning materials. This is a figure of the affordability of hardware supporting online learning

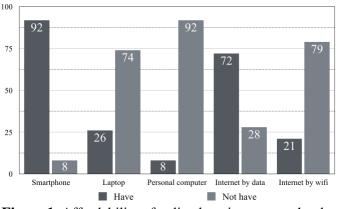
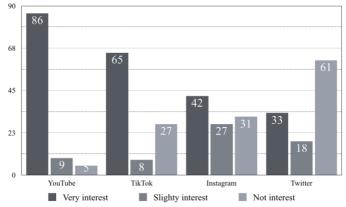
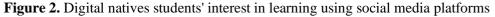


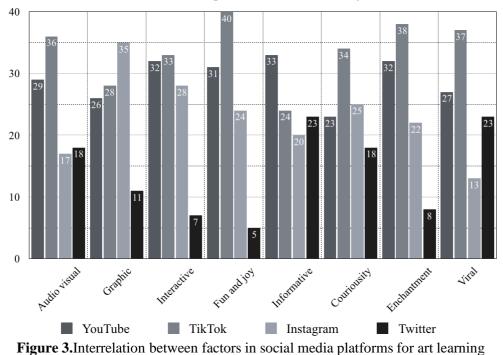
Figure 1. Affordability of online learning support hardware

When the hardware problem is resolved, the teacher is faced with a platform problem that students favor. This needs to be considered because, as a text, learning art in elementary schools requires more effort to attract students' attention. Students like YouTube because the platform, which is a subsidiary platform of Google, is familiar to the community (Figure 2). What's interesting is how TikTok was able to occupy the second position of the most popular platforms. This is reasonable, because TikTok is a platform that is ranked first in the most popular and downloaded platforms on the PlayStore(Fook et al., 2021). Unlike the two platforms, Instagram and Twitter are considered obsolete and unattractive. Ironically, especially Twitter, does not provide motion pictures, but in the form of writing. Of course, there is concern about low reading interest. Therefore educational content creators on YouTube and TikTok need to consider aspects of learning that improve students' reading. This is a figure a digital natives students' interest in learning using social media platforms.





Digital natives are generation students like YouTube and TikTok, or other media platforms because of their audio-visual and graphic interactivity, enjoyment, curiosity, charm, the viral distraction of social media, and undoubtedly informative elements (Figure 3). Indeed, for digital natives students, the main factor in interrelating between platforms that can be used as a learning medium is an interactive and informative factor, which is supported by charm in its presentation (Figure 3). This, of course, requires teachers to be more proactive in accommodating learning for digital natives students as a text, with the platform and details in it as co-text. This is a figure of Interrelation between factors in social media platforms for art learning.



Co-text in social media platform is depend on globalization that represents the increasing dependence, interconnectedness, and integration of the world towards global flows. Globalization, and subsequently technology, has become a driving force in developing education policy in the digital native era(R. Patton et al., 2020). Most elementary school systems are changing their curricula and instructional policies to ensure that students are sufficiently "globalized" and able to compete across various sectors in the digital native arena(Ghavifekr & Rosdy, 2015). The skills needed in the digital native era are visual reading and critical and exploratory thinking skills related to cultural arts. Therefore cultural arts education occupies a central position in the digital native era(Hicks & Turner, 2013; Spalter & Van Dam, 2008). This is supported by the argument that other skills (as co-text) that are particularly relevant to the 21st century and the digital native era are critical thinking, problemsolving, communication, collaboration, creativity, media literacy, and cross-cultural skills(Bowen et al., 2014; Bowen & Kisida, 2017; G.-J. Hwang et al., 2020). With this background as text, making literacy in the use of digital natives technology becomes a factor in believing that cultural arts have an essential role in increasing students' abilities(Weninger, 2017). However, the difficulty is in releasing cultural arts from the legitimacy of the mainstream, which says that cultural arts are only a complement to other fields. Therefore, within this framework of thought, cultural arts must reinvent itself to help maintain an increasingly important culture of innovation concerning the digital native era to help determine the significance of cultural arts in the future and ensure their place in the world education canon.

Teacher in a central role following education that always develops in theory, models, achievements, and applications to prepare students for the digital native era, including cultural arts education. In order to achieve the goal well, the teacher is seen as a central point in the use of digital native technology in learning sustainable arts and culture. This is due to the ability of digital natives technology to provide a dynamic and proactive learning environment as its context (Spalter & Van Dam, 2008; Weninger, 2017). Meanwhile, the objective of integrating digital native technology in learning arts and culture is to improve its co-text in form of the quality, accessibility, and cost-efficiency of teaching delivery to students, which also refers to the benefits of digital native networks to face the challenges of globalization today(Black & Browning, 2011; Pianfetti, 2001; M. B. T. Sampurno, 2019) (Black & Browning, 2011). Adopting digital natives technology in learning arts is not achieved in a short time but is a continuous step that supports teaching and learning in the complexity of the sources of knowledge that digital native technology has(Gomis-Porqueras & Rodrigues-Neto, 2018; Msila & Setlhako, 2012). This is a figure The position of teacher as digital natives or digital immigrant.

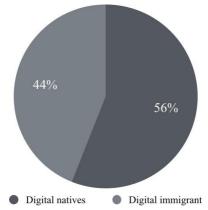
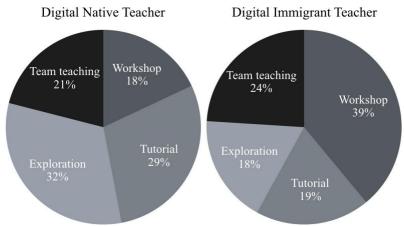
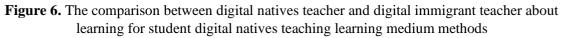


Figure 4. The position of teacher as digital natives or digital immigrant

The exciting thing is when discussing in the context of the teacher. Most teachers consider themselves not to be members of the digital natives' generation, even though they belong to the millennial generation (Figure 4). They replied that there are still many difficulties in adapting to keep up with the generation of digital natives. This is interpreted as text because it has a central role in art learning in the context of the teacher. In addition, teachers have different perspectives about the medium in making learning materials or studying learning models for the generation of digital natives (Figure 5 and Figure 6).





Teachers included in the digital natives' group choose to explore new things related to learning media. Unlike the immigrant digital teachers who choose to participate in workshops or tutorials and do collaborative work in making learning media for digital natives students. This becomes the context in the teacher's position. Interestingly, in collaborative work, teachers from digital immigrants invite teachers from digital natives to create learning media that students like.

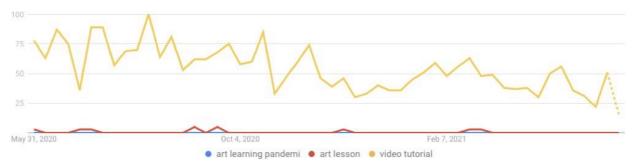


Figure 7. Trends searching about tutorial, art lesson, and art learning in Covid-19 pandemic

The integration of digital native technology in learning arts is closely related to learning technology in schools. Digital natives student are familiar with technology, and they will learn better in a technology-based environment (following Figure 7 about needed in art learning on pandemic). Therefore it is necessary to prepare an understanding of digital natives technology in schools. This is because the use of digital natives technology in education contributes to pedagogical aspects where the application of digital natives technology in learning cultural arts will lead to effective learning with the help and support of the IoT era(Kearns, 2016).

Digital native technology also helps teachers designing cultural arts subject lesson plans with a practical, creative and attractive approach to active learning. Previous research has shown that the use of digital native technology in teaching will improve the learning process and maximize the ability of students in active learning(Choi & Piro, 2009; Colman, 2018; Eyal, 2015; Pianfetti, 2001; Son et al., 2019; Tusiime et al., 2020). Integration of digital native technology in learning arts and culture is about applying digital native technology that involves complex concepts and skills to improve student achievement.

Learning arts and culture based on digital native technology can make many changes in schools requiring good educational planning. One of them is equating perceptions related to the rationale, goals, and vision of how the education system works when digital native technology is integrated into the learning process. Furthermore, it needs to be emphasized regarding its usefulness for students, teachers, parents, and the general public in the scope of arts and culture and its relationships with other disciplines.

The development of learning technology at the early of the 21th century indirectly forced the education system to change rapidly(Mills, 2016). This is due to the capability of digital native technology to provide a proactive, easy, and comprehensive learning environment for arts and culture. Currently, the educational paradigm considers digital native technology to provide many facilities in using digital native technology in the learning process. This requires the role of teachers to be more active, especially in the use of digital native technology in pedagogy that can improve student achievement, creativity, and thinking skills based on arts and culture. Furthermore, students in schools have high hopes for integrating digital native technology because they are classified as the millennial generation born and grew with technology and can be classified as the digital native generation.

The development of technology and the emergence of the digital native era and generation have positioned arts and culture education in a central position, namely in terms of liminality to global currents. Liminal space can be seen as a transformative space that occurs when things such as thoughts, knowledge, or ideas are negotiated to become fluid and flexible entities. Space in between is a state of liminality, where the transition in learning cultural arts crosses thresholds and balances each other with the surrounding fields, aspects, or factors(Cook-Sather & Alter, 2011; Gunn, 2020).

The learning of cultural arts as a liminal concept originates from the phase of liminality, which is defined in separation (i.e., detachment from cultural conditions), limen (movement and transition between social structures), and aggregation (a collaborative refinement phase)(Marfil-Carmona & Chacón, 2017; Pérez Miles & Libersat, 2016; Rantatalo & Lindberg, 2018). Liminality in this study has the meaning of learning cultural arts, which is applied with a focus on 'transitional space or time' as a limen phase, which allows individuals or groups to acquire new identities, status, or knowledge by leaving legitimate positions or mainstream currents(Morris, 2011; Rantatalo & Lindberg, 2018; Svasek, 2015).

Integrating digital native technology in learning arts and culture provides an opportunity to better balance theory and practice(Lindberg, 2020; Morris, 2011; Shepherd et al., 2017; Svasek, 2012). This relates to negotiations that are channeled through practical practice based on theoretical knowledge and understanding. Practices are also carried out from an artistic point of view and identity with reflective action, where identity is developed through questions about the position of cultural arts education in the global arena. Liminality is similar to the conceptualization of space, which emphasizes how space is formed through enactment and habituation (Cook-Sather & Alter, 2011; Jaskot, 2019; Leow & Neo, 2014)(Cook-Sather & Alter, 2011). Therefore, liminality exists as a negotiation catharsis in the relationship between generation and digital native technology and cultural arts learning. Liminal space is also positioned as a metaphor to describe the situation in which learners experience in appropriating the 'threshold concept' to obtain new views.

Text is defined as a material that becomes a general object of a phenomenon which in this study is art learning. Art learning has text in learning materials such as batik, painting, making crafts, and drawing. On the other hand, co-text is defined as a focus in a text or as small particles that make up the rigid and sharp text. Co-text in art learning for digital natives in elementary schools during the pandemic in the form of things to support online learning and interplay it with learning outcomes.

The use of collaboration between students, online learning tools, and teachers provides multidimensional co-text education. This refers to art is considered suitable as a multidimensional educational medium because it is considered to have a match. Multidimensional co-text in art learning for digital natives can develop basic students abilities such as physical, perceptual, intellectual, emotional, social, creative, and aesthetic skills (M. B. T. Sampurno et al., 2020; T. Sampurno, 2015). Based on this statement, it can be seen that art learning for digital natives has the potential to develop students thoughts, feelings, and behavior. With technology in art learning, which has various complex elements, it can play a role in this educational approach.

If the art learning for digital natives is discussed based on each co-text element of the multidimensional approach, it can be correlated with art elements, *first*, regarding children's physical abilities. The use of digital technology does not give priority to physical abilities, but they invite students to do physical enrichment in learning arts. Teachers have understood that technology often reduces physical aspects. Therefore art learning is positioned as a balance between physics and technology (Ata-Akturk & Sevimli-Celik, 2020; R. Patton et al., 2020). Physical skills or can be called motor skills, can be processed through digital natives arts education. To develop children's fundamental abilities from their physical or motor skills by introducing and training the child's gross and fine motor movements, increasing the ability to manage, control body movements and coordination through filter on social media (Carpenter & Green, 2017; Law et al., 2019; Sample et al., 2018). If it is related to the role of art in the development of children's physical skills, it will be correlated (Lewis & Lewis, 2018; Liu & Luton, 2011; T. Sampurno, 2015). The elements of physical motion in social media filters at art learning for digital natives, such as jump and make dance movements, paintings, also support the child's fine motor movement training in arts. For elementary school children, it can also be used as gross motor training and movement control and management.

The existence of game rules in each art learning instrument to achieve a cooperation of the students according to their respective portions in art learning activity.

Perceptual development becomes the next element of co-text in multidimensional digital natives art learning education. Perceptual development introduces students to the IoT environment through their style and captures the meaning with their sensory senses, which are then digested in their brains (Figueiredo, 2015; Msila & Setlhako, 2012). The child's perceptual development is a reaction to the stimulation of his excellent sense organs through sight, hearing, touch, and then processed in the brain into an unknown perception on the digital technologies art learning. In this development, there are three processes, namely sensation, perception, and attention (T. Sampurno, 2015). A sensation is an event of receiving information received through various senses due to sense contact with the receiver on the technological art learning. Perception is an interaction of information captured by the senses of the recipient in a skill that can directly impact the perceptual. Third, attention refers to the selectivity of perceptions but tends to be more inclined towards awareness, which is only focused on one object, and other objects are not responded to.

Furthermore, it is intellectual development or it can be called cognitive development. This development comes from biological pressure to adapt to the digital natives art learning environment through two processes of assimilation and accommodation and the existence of the organization of thinking structures (Hendy, 2020; T. Sampurno, 2015). Each age stage has its developmental model, and for elementary school children, their language skills will develop and an awareness of an object that must exist or is used to exist, even though the object has been left behind or is no longer seen, heard, heard, or heard touched because they are digital natives student. The view of the co-text object's existence is no longer dependent on mere observation. Entering this period appears egocentric and allows children to develop different imitations, learn to understand. This stage is also marked by a belief about their knowledge and understanding, but they are not yet aware of what they know by rational thinking (Priyaadharshini et al., 2020; Tusiime et al., 2020). In play and learn with technology as digital natives, they are just happy because they can express themselves and move, and this experience will shape their intellectual as they grow up. In the end, the experience of playing technology in art learning is carried out consistently and in the long term will form an organized mindset due to strict conventions.

The subsequent development is emotional development. Emotions are affective experiences accompanied by adjustments from within the individual about mental and physical states that are in the form of visible behavior. The emotional characteristics of children tend to be a lot of moody and inexplicable, tend to be intolerant, always want to be alone, start observing their parents and teachers objectively. Learning activities with technological base will support emotional development so that it is more organized and mature. Learning methods in digital natives art learning that support emotional development include learning by trial and error, imitating, equating oneself, conditioning, and learning under guidance and supervision (Bown & Ferguson, 2018; Colman, 2018). The elements in the digital natives art learning media are considered capable of supporting the process of emotional development. This emotional development will ultimately require children to have character because they are more mature and organized emotionally. The personal growth of a child is not only judged by intellectual intelligence but also by character and awareness into digital technology. By having a solid character, children will survive in a broader and more complex environment into net and IoT era.

Social development is equally vital in multidimensional digital natives art learning. The forms of social behavior at the digital age of children include defiance, aggression, quarrels or fights, competition, cooperation, assertive behavior, selfishness, and sympathy (T. Sampurno, 2015). Defiant behavior is trying to fight back as a reaction to the application of discipline or demands from parents or the environment that is not by the child's wishes. This behavior can be controlled by learning to play the technological medium in digital natives children art learning. The different portions of the play for each digital natives art learning instrument as co-text can minimize defiant behavior, not

negatively impact other behavior. Mature social development will make it easier for children to survive in the net environment, which will adapt to social norms and net social interactions in net environment nowadays.

Next, is the development of creativity. Creativity is the ability to think about something in a new, unusual way and display unique problem-solving ways (Csikszentmihalyi, 2018; S. Y. Hwang, 2017; James & Sternberg, 2010). Sternberg (2010) introduces creativity in the theory of intelligence, saying that many children with high intelligence produce great works but not always new works. The co-text of digital natives art education give creative children tend to think divergent and it stimulated by providing technological art learning as a medium for children's expression. Creativity also stimulated the aesthetics development that can be said development in expression and appreciation (Carter, 2008). Children have the nature to express what they feel and think and expect reciprocity. In this development process, children need to cultivate basic abilities, namely physical skills and sensitivity to what covers the things they want to express in digital natives technological media for art learning. Aesthetic development requires a mature foundation of integration so that children will be able to express and appreciate aesthetically.

Conclusion

Learning art during the Covid-19 pandemic provides new experiences for students and teachers because the interrelationships have not been neatly established between the digital natives' generation and digital immigrant teachers and students who are natural digital natives. The teacher as a facilitator needs time to adapt to technology-based learning. This needs to be considered by all teachers, whether they are in the digital natives or digital immigrant category, because in the future, learning using technology will become a natural style. This is to accommodate the needs of digital natives students who will be more attracted to digital learning in the future. Interactivity and informative aspects and the use of social media features are needed to be studied to facilitate digital natives students in learning. In addition, that the elements of art learning, such as the learning model, the intimacy aspect between teachers and students, and the digital natives learning ecosystem in them are continuously developing by considering the element of entrainment.

Entrainment intertwines between learning elements that make the transition to a form of resilience in learning. Integration between learning elements is needed to meet the prerequisites for resilience for digital natives students, including (1) intimacy between text and co-text learning, (2) text competence and co-text learning, and (3) entrainment in learning-based ecosystem of digital natives class. The use of collaboration between students, online learning tools, and teachers provides multidimensional co-text education. This refers to art is considered suitable as a multidimensional educational medium because it is considered to have a match. Multidimensional co-text in art learning for digital natives can develop primary students' physical, perceptual, intellectual, emotional, social, creative, and aesthetic skills

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