Postdigital Visual Literacy: Visual Entanglements and Dynamic Learning Processes in Art Education

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ABSTRACT

In a world permeated by images and confronted with social and ecological challenges, future-oriented education, in which technology is a significant factor in shaping processes, is becoming increasingly important. Digital media are transforming the methods and processes through which knowledge about the world is generated, necessitating a reorientation of educational practices. In this context, postdigital images have the potential to stimulate a redesign of teaching and learning processes in art education. By addressing and exploring the fluid nature of these images, art educators offer spaces for shared knowledge exchanges in which postdigital visual literacy is not only taught but also collaboratively developed by educators and learners alike.

INTRODUCTION

In the spirit of 21st-century learning, the STEAM subjects (Science, Technology, Engineering, Arts, and Mathematics) hold a significant position in digital education. In addition to conveying scientific, technical, and mathematical knowledge, they impart a variety of skills, such as thinking creatively and critically, developing new approaches to problem-solving, and enhancing communication through interdisciplinary collaboration (Belbase et al., 2021). Integrating the arts into STEAM is intended to include creative and aesthetic aspects in education to promote creativity, encompassing both creative and critical thinking. In a world permeated by images and facing social and ecological challenges, educators require a future-oriented education in which technology plays a key role in shaping the learning experience (Graham, 2021). However, digital media and information technologies are transforming the methods and procedures through which knowledge about the world is generated, necessitating a reorientation of educational and teaching-learning processes (Arvedsen et al., 2022; Marotzki & Jörissen, 2008), including those in art education.

The pervasive presence of technology suggests that a reflective approach to digital media and their structures – especially in educational contexts – has become indispensable. International discussions about young people's digital dependency and how this impacts academic performance (Karakose et al., 2022; Tülübaş et al., 2023), as well as debates on mobile phone bans in schools (Campbell et al., 2024; King et al., 2024; Böttger & Zierer, 2024), have highlighted how deeply digitalization is affecting education systems. Campbell et al. (2024) noted that there remains a general lack of sound, evidence-based foundations for decision-making either for or against banning mobile phones in schools. Instead of focusing on the question of an outright ban, more attention should be paid to how young people can be empowered to engage reflectively and responsibly with digital technologies and how these technologies can be meaningfully integrated into teaching (Shiri & Baigutov, 2025). Art educators also face the challenge of developing new approaches to enable appropriately the integration of digital media and related topics.

The desire and need to expand digital competencies are evident among teachers and learners (Grájeda et al., 2023; Shiri & Baigutov, 2024; Lin & Chen, 2024). However, there remains a lack of competencies and training within educational structures regarding the meaningful use of digital devices in learning processes (Farrell et al., 2020). In art education, several key challenges are emerging. On the one hand, digital media must be integrated into the subject, while corresponding competencies are targeted and promoted; on the other hand, young people must learn to engage critically and reflectively with the image-based content they encounter daily. The reception of images is a central element of art classes; learners' visual literacy is fostered in many ways, while teachers possess

in-depth knowledge of the methods and rules for interpreting images. Engaging with digital images, however, is significantly more complex due to the processes and characteristics inherent in these images. How to achieve such integration and provide educationally meaningful engagement with this subject area has not yet been comprehensively explored by specialist teachers; therefore, this may be a starting point for the realigning of art education concepts.

Another important aspect encompassed by integrating digital technologies and topics is the transformation from a teacher-centered model of instruction to a more active, cooperative learning environment. In this setting, learners play a dynamic role, enabling a rethinking and redefining of authority relationships within the educational context (Farkas, 2012). In this regard, postdigital images can be an interface in art education, enabling teachers and learners to meet as equals in visual literacy, since, due to the images' connection to everyday life, both groups are familiar with and influenced by these images. Consequently, it seems necessary to rethink competencies in visual literacy, specifically aligning them with the demands of a postdigital society – an issue examined more closely in the following section.

THEORETICAL BACKGROUND

Postdigital Images: Between Analog and Digital

Before a deeper engagement with the research focus is possible, the key terms are explained theoretically.

A fundamental concept is *postdigitality*, which describes the entanglement of digitality with the societal environment, whether social, political, or cultural (Klein, 2019). The prefix "*post*" does not refer to a time after digitality but expresses the permanent establishment of a mental and historical state of modernity that can no longer be clearly "distinguished from other states" [translated by the author (Schmidt, 2020, p. 58). In this context, the prefix signifies the dissolution of boundaries between analog and digital states, encompassing the omnipresence and self-evident use of digital media, as well as the resulting digital permeation of society. According to Campbell and Olteanu (2023), the postdigital contribution lies in overcoming the dichotomy between embodied experiences in real environments and interactions in digital media environments (Hawley, 2024, p. 869).

Overcoming this dichotomy can occur, among other ways, through digital images disseminated via, for instance, social media platforms, which have the potential to influence cultural practices by merging the digital and analog worlds. Consequently, the boundaries between the societal environment and digital images, as well as between materiality and immateriality, can no longer be clearly separated. In this interwoven reality and in the term "*postdigitality*", such images

are understood as *postdigital images*. Through gestures such as scrolling, swiping, or typing, these images are accessible purely digitally and are considered entities. Individual images can be understood as an "entity" because they contain and store collected information and are in an interrelationship with "[…] other human and non-human actors […]" [translated by the author] (Schütze, 2019, p. 130). An example of postdigital images is memes, as digital image formats and analog social structures overlap.

Visual Entanglements

When visually engaging with postdigital images, both individual and diverse forms of entanglement can be identified, and these are central to understanding perceptions and educational processes. Noë (2023) used the term *"entanglement"* to illustrate how human perception and thinking exist in a reciprocal, complex relationship with the environment and with other people, as well as how experience should be considered an open process. In this context, consciousness is understood as a dynamic process that emerges through interaction with the world; the perception of external stimuli is viewed as an active, dialogic process.

If Noë's (2023) concept of *entanglement* is applied to the reception of postdigital images, then one can assume that individual perception exists in a continuous, active, and dialogical process with what is seen digitally. This process results in a close entanglement between individual consciousness and these images, and postdigital entanglements form a fundamental component of current *everyday literacy* and contribute, among other things, to the emergence of new forms of social practices (Bhatt, 2023, p. 3).

Visual Literacy in the Digital Life of Adolescents

For adolescents specifically, digital communication and the use of online platforms are omnipresent; visual forms of communication through digital media play a central role in their daily activities (Bocksch, 2022; Kędra & Žakevičiūtė, 2019). Digitalization means images have great reach and swift dissemination. Unlike text, which requires sequential reading, visual signs in images can be perceived simultaneously, which enables quick scanning of image content (Burri, 2008). Image-based social media platforms, such as Snapchat, BeReal, TikTok, and Instagram, benefit from the global, rapid readability of visual content, which is evident from the number of young users (Feierabend et al., 2023). Through their participation, adolescents shape cultural and societal processes daily. The ubiquitous presence of digital images in young people's lives has caused *visual literacy* to become *everyday literacy*, making engagement with this topic essential in art education. *Visual literacy* encompasses the competencies and skills necessary to interpret, read, and communicate through images (Elkins, 2008). Children and adolescents develop this ability within their social and media

environments (Arvedsen et al., 2022). However, unlike reading and writing, image interpretation does not follow a standardized approach, leaving room for diverse interpretations, which makes addressing postdigital images complex.

The concept of *literacy* extends beyond the cognitive-based approach of reading and writing to include ethnographic perspectives for describing everyday life and its practical applications in the context of literacy (Bhatt, 2023). Street (1984) adopted an ideological perspective of this term and discussed *literacy practices*. He viewed literacy, specifically the reading and writing taught in a given context, as being connected to social structures. This perspective shifts the focus beyond the mere act of reading and writing to include the meanings, values, and ideologies associated with these activities. The concept, therefore, offers the potential to relate specific situations to broader cultural and structural aspects, as well as questions of power and agency (Bhatt, 2023).

As with postdigital images and the concept of *literacy practices* (Street, 1984), the acts of reception and production are inseparably connected to societal dimensions. Digital images are constantly consumed, produced, overwritten, and replicated in an ongoing dialogue between recipients, meaning these images are subjected to continuous transformation. The recipients function as *individual interfaces* who establish a connection between society and the images.

Within this interaction, a person's visual literacy unfolds in a dynamic, active, and dialogic process. The close interconnection between recipients and digital images, as well as between *visual literacy* and social processes, indicates the skills expressed in engaging with these images can be understood as *postdigital visual literacy.* Due to the pervasive presence of digital images in adolescents' everyday lives, engaging with and fostering these skills in art education should become a recurring subject in the classroom.

IMPLICATIONS

Due to the complex dynamics of postdigital images and the individualized, everyday engagement with them, the reception of their content often follows an automated process. The interwoven nature of digital images with the societal environment – whether on a social, political, ecological, or cultural level – leads to constant mutations, subtle cultural changes, and evolving practices (Cramer, 2015). Therefore, it is essential to promote forward-thinking and *postdigital visual literacy* among students. Incorporating postdigital images into art education enables a dual approach: the reconsideration and transformation of existing art pedagogical approaches to image analysis under postdigital conditions, as well as the potential to reshape teaching and learning scenarios.

First, the approach integrates students' everyday experiences into the classroom. Second, the approach focuses on an area of knowledge not fully explored by subject teachers. In this context, teachers need not present themselves

as omniscient authorities but can acknowledge mistakes and gaps in their knowledge, viewing "the possibility of failure […] as a productive potential" (Grünwald, 2020, p. 12; translated by the author).

The dynamic nature of these images not only enables reciprocal knowledge exchanges between teachers and learners (Gramsci, 1994) but also supports the development of *relational awareness* among participants (Lacković et al., 2024), which encourages an understanding of interconnection and forms the foundation for deeper engagement with postdigital conditions. Moreover, students can be guided toward critical and creative thinking by learning to question and actively shape the fluid and transformative nature of postdigital images. In this process, art education becomes a space in which *postdigital visual literacy* is both conveyed and collaboratively developed.

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