



Universidad Nacional de Catamarca - Facultad de Humanidades
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The Didactics of the Arts through Intelligent Systems: Between Cultural Specificity and Western Hegemony

Khaldia Taleb

Abdelhamid Ben Badis University of Mostaganem, khaldia.taleb.etu@univ-mosta.dz

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Abstract:

This study examines the limits of employing intelligent systems in arts education under Western dominance over the data used to train their models. It explores how these systems can be used while preserving cultural specificity and artistic identity and avoiding complete dependence on them. The study discusses Western control over data, its standardization and hidden biases, the changing role of the teacher, and the growing reliance on automated assessment and its consequences. It addresses the following question: Does relying on intelligent systems trained mainly on Western models lead to the disappearance of local cultural specificity and artistic identity? It concludes by proposing practical solutions.

Keywords: Intelligent Systems, Algorithmic Bias, Arts Education, Cultural Specificity.

1. INTRODUCTION

As a result of the rapid technological developments witnessed in recent years, the world has undergone a profound transformation and a qualitative shift across virtually all fields. This change is largely attributable to the radical evolution of the role of artificial intelligence. Within the field of arts education, AI can no longer be regarded merely as a secondary technological aid or an additional tool designed to provide assistance. Rather, it now assumes multiple functions: it can act as a producer capable of generating artistic works, a designer contributing to the formulation and development of ideas, a critic issuing judgments on artistic creations, and a guide supporting and directing learners. In some cases, its role extends even further, becoming an integral partner that is increasingly difficult to dispense with throughout the educational process.

The applications of artificial intelligence in arts education are broad and diverse. They range from text-to-image generation systems to specialized digital applications designed for stylistic analysis and the provision of immediate and direct feedback to students on their artistic work. They also include automated assessment systems capable of analyzing artworks, classifying them, and evaluating their quality or level of achievement. Despite the remarkable development, comprehensiveness, and capacity of these technologies to



facilitate numerous educational processes, their growing use raises important questions concerning the extent to which such systems can remain neutral and objective in their treatment of different users while respecting cultural diversity and cultural specificity.

More specifically, a central concern is whether these technologies genuinely operate according to universal and impartial standards or whether they embed implicit aesthetic norms and evaluative criteria derived from culturally restricted contexts, particularly those associated with Western frames of reference. This concern is reinforced by the study *The Silicon Gaze*, conducted by researchers affiliated with the University of Oxford and the University of Kentucky. Drawing on the analysis of millions of ChatGPT queries, the study argues that generative models demonstrate systematic preferences for wealthy Western countries, frequently representing them as “better,” “smarter,” and “more innovative,” while many regions in Africa, the Middle East, and Latin America occupy comparatively lower positions. Such findings suggest that these systems are not culturally neutral but may reproduce and amplify deep-seated geographical and socio-economic biases that privilege Western contexts while marginalizing countries and communities in the Global South (kerche, 2026).

Mark Graham, Professor of Internet Geography, further emphasizes that when artificial intelligence is trained on biased data, it can intensify such biases and disseminate them on a much broader scale. He therefore stresses the importance of greater transparency and more extensive independent scrutiny of the ways in which AI systems generate and present claims about people and places (kerche, 2026).

Culture is not exempt from these concerns. On the contrary, AI systems may reinforce Western cultural values, and imposes them upon learners belonging to other cultures, thereby impacting their identity, cultural heritage, and creative autonomy.

This study is grounded in a central research problem articulated through two interrelated questions: Does reliance on intelligent systems trained predominantly on Western data and models in arts education contribute to the erasure of cultural specificities and local artistic identities? Furthermore, what measures can be adopted to establish a balance that enables educators and learners to benefit from these systems without embracing them uncritically or completely, while simultaneously preserving artistic and cultural identity?

To address these questions, the study adopts a critical theoretical methodology centred on the analysis of contemporary specialized literature from several interconnected perspectives. These include the philosophy of technology, which examines the nature and implications of digital tools; algorithmic critique, which seeks to identify biases embedded within technological systems; arts education in the context of artificial intelligence and the pedagogical challenges it creates for both teachers and learners; and the sociology of art, which investigates the social and cultural contexts within which artistic creativity is produced and interpreted.

The study also employs a descriptive-analytical approach based on a review of specialized literature concerning artificial intelligence and arts education, alongside the examination of selected practical models of image-generation systems. This approach aims to identify algorithmic and cultural biases that may threaten artistic identity and cultural specificity.

The significance of this study lies in its attempt to move beyond narrowly technical discussions concerning the ways in which artificial intelligence can be used in arts education. Instead, it seeks to interrogate the less visible objectives, structures, and power relations underlying the deployment of such systems. From this perspective, several critical questions emerge: Is the limited quantitative and qualitative representation of non-Western data merely accidental, or does it serve particular structural or ideological interests? Which cultural heritage is being consolidated, legitimized, and celebrated through these technologies, and which identities are consequently subjected to marginalization or exclusion?

Intelligent systems are human-made technologies and therefore do not operate in a cultural or ideological vacuum. They are developed through human choices, classifications, and training processes involving datasets that may include paintings, musical compositions, theatrical texts, sculptures, and other cultural artefacts, many of which are disproportionately drawn from Western cultural traditions. Consequently, when such systems are trained primarily on these models, they tend to reproduce what they have learned from them. Cultural and artistic expressions that fall outside these dominant patterns may therefore be treated as unfamiliar, unconventional, or aesthetically inferior. Such tendencies can be interpreted within broader discussions of Western cultural hegemony.

The term *hegemony* derives from the Greek word *hēgemonia*, referring broadly to leadership, rule, or domination. The concept of hegemony to the Italian thinker Antonio Gramsci, takes form of an analytical tool to understand how the ruling classes maintain power, not only through direct coercion and repression, but also through persuasion and consent, and cultural conformity (Otheman, 2026)

Within contemporary digital contexts, hegemony may be understood as a shift from direct military or territorial domination towards softer forms of technological and epistemic control exercised through the ownership and monopolization of data, algorithms, digital platforms, and artificial intelligence systems. This tendency can be observed in the extensive influence exercised by major technology corporations such as Google, Microsoft, Amazon, and Meta over contemporary digital infrastructures and information environments. Such concentration of technological power has contributed to critical discussions of what is increasingly described as *digital colonialism*.

Digital colonialism refers to forms of dependency and exploitation produced by technologically dominant powers, whether powerful states that possess advanced technological infrastructures or large technology corporations, through their control over the

digital resources, infrastructures, data, and platforms upon which developing countries and societies increasingly depend. In contemporary critical literature, the concept is used to describe a new mode of domination that does not rely on direct military occupation, but rather on the monopolization of digital infrastructure, ownership of platforms, and control over the collection, circulation, processing, and interpretation of data and information. As argued by Mezimesh Al-Omaria in her study *Digital Colonialism and the Reshaping of Sovereignty in the Global South: A Postcolonial Approach in the Age of Generative Artificial Intelligence*, this emerging form of domination represents a reconfiguration of colonial relations within technological and informational environments (Mezimeche, 2026).

One of the consequences of these dynamics is the growing dominance of Western content within digital environments. Such dominance is reinforced by the privileged position of the English language, as well as cultural bias in algorithms and technologies, and this leads to reinforcing cultural alienation

2. Training data of intelligent systems between dominance and biases:

Training data constitute the fundamental basis upon which artificial intelligence systems build their artistic and technical knowledge. They function as the foundation on which the intellectual structures of these systems are constructed. Despite the aura of neutrality, objectivity, and detachment from human influence that often surrounds them, training data are never purely "raw" or isolated from external contexts. On the contrary, they are the final outcome of a sequence of human choices.

These choices are shaped by prior assumptions, established priorities, and values rooted in particular cultural environments and specific historical moments. Training data are therefore inevitably embedded within particular historical and cultural contexts. As such, they carry priorities and value systems that reflect specific ways of perceiving and interpreting the world. This makes them a kind of reflective mirror bearing the imprint of dominant values and prevailing frames of reference, which artificial intelligence systems may subsequently reproduce without any apparent awareness of doing so.

At the same time, these systems may exclude, misrepresent, or inadequately reproduce cultural elements that were absent or insufficiently represented in their training data. Even when they are capable of responding to a particular request, they may incorporate Western elements into the resulting output, sometimes at highly subtle levels, including color palettes, visual details, stylistic conventions, or aesthetic characteristics. Such representational imbalance is commonly discussed under the concept of algorithmic bias.

Algorithmic bias has been defined as "bias or preferential treatment of one group over another in artificial intelligence systems, or the unjustified privileging of certain groups over others" (abdul haq, 2025, p. 90). It has also been described as "a state of bias or deviation in the outputs produced by machine-learning algorithms, resulting from biased assumptions introduced during the development of the algorithm. It may represent a reflection of racism

and social prejudice directed against a particular group, religion, or social class, or it may result from biases embedded in the training data supplied to the artificial intelligence system" (abdal haq, 2025, p. 90).

In this sense, algorithmic bias should not be understood merely as a technical malfunction or an accidental statistical irregularity. Rather, it may be viewed as the computational reproduction of pre-existing human and societal prejudices encoded within datasets, design choices, classification systems, and model-development processes. Artificial intelligence therefore does not generate bias independently of society; instead, it can absorb, reproduce, and potentially amplify forms of discrimination and cultural prejudice already present in the human environments from which its data and design assumptions originate.

Artificial intelligence models in the field of the arts rely heavily on Western artistic works. Their algorithms are trained on datasets that largely reflect Western cultural heritage, which can lead to the conceptualization of art primarily through Western cultural frameworks and to the positioning of Western aesthetics as a dominant reference point for judging artistic value. In many cases, the artistic material used in training datasets is derived from traditions such as the Italian Renaissance, French Impressionism, and other canonical Western movements.

As a result, widely used image-generation systems such as Stable Diffusion, Midjourney, and DALL·E are trained on large collections of images and textual descriptions in which Western artistic traditions are strongly represented. By contrast, non-Western artistic traditions are often underrepresented or marginalized, despite their long and sophisticated histories. These include Arabic calligraphy, Persian miniatures, African clay arts, Indian sculpture, Asian woodblock printing, and Chinese painting.

It has been observed that advanced text-to-image generation models such as Stable Diffusion tend to produce images with Western visual characteristics as default outputs. These models may also encounter difficulties when attempting to represent minority cultures accurately, without stereotyping or discriminatory representations. One explanation for this problem lies in the composition of the datasets used to train such systems, including datasets such as LAION-5B, which contain a substantial proportion of images associated with Western settings and visual conventions (Liu, 2024).

A recent study published in 2026 in *Digital Education Review*, involving twenty-eight students specializing in digital art in Kuwait and using DALL·E 3, found that the system repeatedly generated visual outputs that the researchers associated with what may be described as algorithmic Orientalism. In this context, local cultural heritage was either represented through stereotypical imagery or, in some cases, rendered largely invisible. The students consequently had to engage in what the researchers termed "scripting counter-resistance" in order to challenge homogenizing data-driven narratives and preserve their regional cultural identity (Abdulmajid, Alali, & Alsharrah, 2026, p. 114). Such findings provide evidence of the

potential marginalization and erosion of local Arab cultural identity within AI-generated visual environments.

More generally, when a student is asked to produce an expressive artwork addressing themes such as oppression or poverty, intelligent systems are likely to generate work grounded predominantly in Western aesthetic references. The resulting image may therefore conform almost entirely to Western aesthetic conventions. Even when the system recognizes that the user comes from a non-Western context, it may still generate representations of women, men, or children with predominantly European or American features and employ colors and visual symbols associated with oppression or poverty according to European or American cultural conventions. In this sense, such systems operate according to relatively narrow and limited representational standards rather than drawing upon the diversity of aesthetic frameworks found across the world's cultures. This occurs largely because these are the cultural materials and representational patterns on which such systems have been trained. It does not mean that these conventions constitute the only, or the most comprehensive, means of representing oppression globally. Rather, it exposes the limitations of these systems.

This problem cannot be reduced merely to inaccurate representation or quantitative underrepresentation. It constitutes a qualitative distortion that may have direct consequences for students' learning outcomes when they rely on such systems. It also raises questions about which cultural and institutional actors exercise the greatest influence over the data, standards, and assumptions embedded within algorithmic systems.

Although the developers of artificial intelligence, particularly major technology companies, frequently present these systems as objective, data themselves are not neutral or naturally occurring raw materials. As (Crawford, 2021, p. 78) argues, data are human constructions shaped by histories of classification as well as by political and cultural choices. Consequently, algorithms cannot be separated from the broader social, political, and cultural contexts within which they are developed. They are shaped by these contexts and, in turn, reproduce aspects of them. When AI systems are predominantly trained on data derived from particular cultural traditions, they cannot be assumed to possess a comprehensive understanding of the diverse artistic traditions and cultures of the world.

Under such conditions, Western art may become implicitly established as the dominant aesthetic norm, while other artistic traditions are treated as secondary stylistic deviations from that norm. This dynamic can be understood as a form of epistemic colonialism because it establishes a hierarchy of knowledge in which Western cultural frameworks are granted epistemic priority. In this respect, it recalls aspects of earlier forms of colonialism, in which Western political and military power asserted dominance over other societies. In the contemporary algorithmic context, however, this form of dominance operates more implicitly through systems of knowledge production, classification, representation, and evaluation. It

can restrict the capacity of local communities to define their own artistic traditions and to evaluate them according to culturally appropriate criteria.

Such processes may therefore be described as a form of epistemic or knowledge colonialism. In some respects, their implicit character makes them particularly concerning, since they may contribute to the gradual erasure of local identities and the marginalization of cultural particularity while being accepted by users without necessarily being recognized or resisted as a form of cultural domination.

In this context, it is important to refer to the 2025 report of UNESCO's Independent Expert Group on Artificial Intelligence and Culture, which formally highlighted comparable concerns. The report emphasizes the dual character of artificial intelligence in relation to culture: while AI can create significant opportunities for creativity and cultural production, it can simultaneously reinforce algorithmic biases, obscure cultural specificity, and exacerbate existing inequalities. The report further notes that AI systems no longer merely reproduce or imitate existing cultural works; they are increasingly capable of synthesizing and interpreting them. This development raises urgent questions concerning authorship, ownership, and cultural appropriation or alienation. Accordingly, the report calls for resistance to algorithmic homogenization and excessive platform dominance in order to safeguard cultural diversity and cultural sovereignty (UNESCO, 2025).

3. The Change of the Teacher's Image and Functions:

Education has undergone profound transformations in recent decades because of rapid technological progress. One of the most significant changes is the emergence of artificial intelligence and its integration into the educational process. Intelligent systems can now analyze students' data, design individualized learning paths, and provide accurate, immediate assessment tools. These developments have not only improved learning but have also directly affected the teacher's role. As a result, the teaching profession has required a complete re-evaluation, especially since this technology is spreading globally.

Education has undergone profound transformations in recent decades as a result of rapid technological advancement. One of the most significant of these transformations has been the emergence of artificial intelligence and its integration into the educational process. Intelligent systems can now be used to analyze student data, design personalized learning pathways, and provide accurate and immediate assessment tools. These developments have not been limited to improving learning outcomes. They have also directly affected the role of the teacher and have prompted a broader reconsideration of the teaching profession, particularly given that this technology is not locally rooted.

Traditionally, the teaching profession was based on the direct transmission of knowledge from the teacher to the student, together with the use of conventional assessment methods such as examinations and homework. For example, an art education teacher may teach students techniques for producing a work of local art or creating a sculpture, while also

analyzing artworks, interpreting their symbols, and explaining their significance in relation to identity, collective memory, and local artistic traditions. In this sense, the teacher constitutes a vital element of the educational process. However, with the introduction of intelligent systems that function as guides and evaluators, the teacher's role has gradually diminished. This transformation did not occur at once, but rather developed in stages as the use of such systems expanded and became more widespread. Initially, these systems were employed as supplementary tools for generating ideas or providing technical corrections. They subsequently developed into educational advisers that supported teachers in assessment processes. Eventually, they began to function as primary references for evaluating students' work and, in some cases, as their principal instructional guides. Consequently, the teacher's role has become noticeably reduced, shifting from being at the centre of the educational process to becoming a distributor of tasks who teaches students how to use intelligent systems.

Such a transformation risks diminishing the vitality of education. In the context of art education, for instance, students may lose the opportunity to engage deeply with art itself, to connect artistic practice with identity and collective memory, and to understand the human significance that gives artistic work its vitality. These dimensions cannot be fully provided by artificial intelligence.

Reducing the teacher's role to that of a mere guide or distributor of tasks also has serious implications for the relationship between teachers and students. It may weaken the teacher's relationship with learners and diminish its deeper human and educational dimensions. The student may increasingly become a learner under the direction of an impersonal machine rather than viewing the human teacher as a living role model. This situation also raises questions concerning educational authority and legitimacy, particularly regarding whether greater authority should be assigned to the human teacher or to the machine. A study published in *Digital Education Review* found that most students tended to favor suggestions generated by artificial intelligence (Abdumajid, Alali, & Alsharrah, 2026, p. 128).

This limitation arises because AI "still operates within a set of rules; it is designed to recognize patterns and trends, which means that it often defaults to what is already common or familiar. For artists who embrace the principle of pushing boundaries, AI-generated art therefore remains limited" (Rainey, 2025). This observation highlights the limitations of intelligent systems and the absence of the distinctly human dimension in both artistic production and aesthetic evaluation.

Building on the preceding discussion, (Eichler, 2024) study sought to investigate teachers' perspectives on the use of artificial intelligence in education and to identify their principal concerns regarding its integration into educational contexts. The study involved eight teachers who had previous teaching experience in secondary schools within the Dutch educational system. A qualitative research approach was adopted, using data collected

through semi-structured interviews in order to explore how teachers currently perceive the role of artificial intelligence in education.

The findings indicated that teachers were not yet making extensive use of artificial intelligence; nevertheless, they believed that the integration of emerging technologies could have substantial implications for education. They also expressed a preference for the development of a standardized approach to the use of artificial intelligence in educational settings. At the same time, some participants expressed concern that increasing reliance on AI could contribute to a decline in students' critical-thinking skills (Alkharusi, Al-Aghbari, & Al-Qalhati, 2025, p. 221).

Within this context, the role of the teacher must be reconsidered in parallel with the increasing integration of artificial intelligence into education. The teacher cannot simply be eliminated or replaced by an automated or machine-based instructor. Rather, an interactive relationship should be established between the teacher and AI systems, in which technology functions as a supportive tool rather than as a substitute for human educators. As technological development continues, the teacher's role may evolve from that of a conventional transmitter of knowledge toward that of a cultural mediator, guide, and critical evaluator. Regardless of the level of technological sophistication achieved by intelligent systems, the human role remains indispensable, particularly in areas requiring cultural understanding, critical judgment, contextual interpretation, and human sensitivity.

4. The Limitations of the Evaluation of Intelligent Systems:

The automated evaluation of students' artistic work is one of the most widely discussed and challenging issues in the age of artificial intelligence, especially in education, where human and creative elements overlap. The evaluation process combines human judgment with artistic criteria. However, introducing artificial intelligence as an evaluator makes the process more complex because it relies on algorithms that often do not understand the true nature of artistic evaluation. Evaluation does not stop at the visible features of an artwork. It also involves deeper understanding, interpretation, and creative criticism. Human judgments are made with awareness, transparency, and fairness. They also consider individual differences and distinguish one artwork from another. This remains a major challenge for intelligent systems, which cannot replace human evaluation. As a result, students may be negatively affected.

Companies that develop automated evaluation systems claim that these systems are trained on a large number of diverse examples. As a result, they are said to provide fast and neutral evaluations of students' work while saving time and effort. However, this approach ignores the human experience, including feelings, imagination, and personal effort. It cannot recognize the nature of these experiences, the emotions behind them, or the source of artistic inspiration.

The variation in judgments produced by artificial intelligence also reduces evaluation accuracy. As noted, "artificial intelligence algorithms are prone to biases and inaccuracies, leading to flawed evaluations or recommendations for students, which may negatively affect their learning outcomes (Ovanin, 2024)." We should also remember that art is deeply human. The problem becomes even more complex because the standards for judgment come from a machine that has no feelings. It cannot distinguish aesthetic appreciation, authenticity, imitation, or creativity. These limitations can be summarized in the following points:

4.1 Lack of Human Communication and the Educational Dimension

Students interact with a machine, an inanimate object that lacks human qualities regardless of how advanced it becomes. It does not understand feelings or social communication, even though it was created and trained by humans using specific techniques. As a result, it cannot interact with students in the same way as a human teacher, who builds social and emotional relationships with students and encourages interaction among them. In contrast, intelligent systems operate in a rigid manner by providing technical support without addressing students' social and emotional needs. Consequently, artificial intelligence systems "fail to capture the depth of human emotions in art. If we speak in the language of art, the subjective nature of art makes it difficult for artificial intelligence to consistently produce high-quality outputs that resonate with audiences and touch their feelings and emotions (O'Brien, 2023)."

Artificial intelligence can generate images, music, texts, and even design scenographic spaces, but it cannot provide students with feelings, emotional support, or human understanding. It also cannot consistently produce works of the same quality. This limits creativity, as it often produces simple outputs, while humans can create works that inspire and amaze. The following two images were generated using artificial intelligence. However, an artist or a creative student may produce more beautiful works and do so consistently. By contrast, artificial intelligence cannot create outstanding results every time because art requires intuition, deep thinking, emotional expression, and an understanding of oneself and others. Although the second image is by the artist Jason M. Allen, he used several intelligent systems, including Midjourney, and entered more than 624 text prompts to produce the final painting. This work won a prize in the state of Colorado in 2022.

Figure (1): Generated by the MIDJOURNEY system



Figure (2): The artwork Théâtre d'Opéra Spatial (Oppenlaender, 2022, p. 192).



4.2 The Absence of Cultural Sensitivity and Constructive Criticism

Although artificial intelligence provides intelligent assessment systems capable of adapting learning plans to the individual characteristics of learners and offering immediate feedback, these systems remain limited in their ability to provide genuinely constructive criticism. This limitation is partly attributable to algorithmic biases, which are particularly evident in the field of art education. Such systems may privilege Western cultural standards and forms of artistic

expression. Consequently, when students produce work that reflects their own cultural background and artistic traditions, their work may receive a lower assessment.

This form of evaluation may negatively affect students' psychological well-being and lead to feelings of frustration. As a result, students may gradually become dependent on the machine and begin to regard its judgments as unquestionably valid. In such circumstances, criticism can no longer be considered genuinely constructive, since the system may fail to provide accurate and contextually appropriate advice and recommendations. This problem arises from the inability of artificial intelligence to adequately recognize cultural differences, which may ultimately result in assessments that are neither fair nor transparent.

5. Ethical Challenges in the Application of Intelligent Systems to the Assessment Process

The use of intelligent systems in assessing students through their artistic work has introduced a number of significant ethical challenges. One of the most prominent concerns is algorithmic bias, since algorithms may be trained on unbalanced or unfairly structured datasets. This problem is further compounded by the lack of transparency surrounding the ways in which these systems operate. Their decision-making processes often remain opaque, making it difficult to determine who is responsible for a particular decision or how that decision has been reached.

In this context, a study conducted by researcher Muge Fazlioglu highlights public concerns regarding the impact of artificial intelligence on individual privacy. As cited by Hamidat Abd al-Ali, "one of the public's greatest concerns regarding artificial intelligence is its negative impact on individual privacy. According to a recent Pew Research Center survey, 81% of consumers believe that the information collected by AI companies is used in ways with which people are uncomfortable, as well as in ways that were not originally intended" (Hamidat, 2025, pp. 475–476).

These concerns become particularly significant when artificial intelligence is introduced into education in general and arts education in particular, since such applications often require the collection of "large quantities of students' personal and behavioral information, including response patterns, levels of interaction, and the amount of time spent completing tasks. Such data are highly sensitive, and any leakage or misuse may result in violations of learners' privacy and undermine trust in educational institutions" (Jaber, 2025, p. 157).

Another ethical concern relates to accountability. In the event of privacy breaches, algorithmic errors, or misuse of students' data, it may be difficult to determine which party should be held responsible. This problem is intensified by the absence of sufficiently comprehensive legal and regulatory frameworks specifically designed to govern the use of artificial intelligence and to protect users' rights. In Algeria, for example, the regulatory framework for artificial intelligence remains at a formative stage. Although a National Council for Artificial Intelligence was established in 2023, there is not yet a comprehensive legal framework addressing all dimensions of AI use. Consequently, students may find themselves

interacting with systems whose decision-making mechanisms, data practices, and institutional responsibilities remain largely unclear.

Excessive reliance on automated assessment may also increase the possibility of errors while simultaneously diminishing the role of human judgment, pedagogical supervision, and educational oversight. Overdependence on intelligent systems may gradually encourage students to adapt their behavior and creative production to the expectations of the system rather than to educational, cultural, or artistic objectives. It may also reduce direct interaction between teachers and learners, thereby weakening an essential dimension of the educational process.

Furthermore, the increasingly open and interconnected nature of digital environments raises additional concerns regarding intellectual property. Creative works submitted, generated, processed, or evaluated through digital and AI-based platforms may not always be adequately protected. This creates uncertainty regarding ownership, authorship, reproduction, and the unauthorized use of students' artistic productions. Consequently, the ethical challenges associated with intelligent assessment systems extend beyond technical accuracy to encompass privacy, transparency, accountability, human oversight, intellectual property, and the protection of learners' rights.

Conclusion

This study concludes that the use of intelligent systems in art education, despite the speed and technical efficiency they provide, is not a neutral process. Rather, it is a cultural practice with political and epistemological dimensions. Uncritical reliance on systems whose algorithms have largely been trained on data grounded in Western cultural references may contribute to the reproduction of cultural dominance and the marginalization of the artistic particularities of non-Western cultures. The study identified three principal mechanisms through which this occurs.

First, there is the dominance of Western data and models. Many widely used systems, such as DALL-E and Midjourney, have been trained predominantly on Western artistic traditions. As a result, they may fail to represent Eastern and African artistic forms accurately and may generate stereotypical, simplified, or distorted representations.

Second, automated assessment remains limited because it lacks human sensitivity, aesthetic judgment, and adequate awareness of cultural context. Consequently, it may produce assessments that are neither fair nor transparent and may frequently overlook the creative and personal dimensions of students' work. Such limitations can negatively affect students' motivation and the development of their artistic identity.

Third, the role of the teacher may gradually decline. Instead of remaining the leader of the educational process and an educator who connects art with memory, culture, and identity, the teacher may be reduced to the role of a task distributor or supervisor of intelligent

systems. This transformation risks depriving art education of its pedagogical and human essence.

Study Recommendations

Based on the findings of this study, several recommendations can be proposed to achieve a balance between benefiting from technological developments and preserving cultural particularity.

- There is a need to establish artistic digital sovereignty through the development of local or regional intelligent systems trained on non-Western art, heritage, and cultural materials. Such systems should be developed under the supervision of academics, artists, and specialists representing the cultural traditions concerned.
- The role of the teacher should be redefined rather than eliminated. Teachers should increasingly function as cultural guides and art critics who are capable of teaching students how to engage critically with the outputs of intelligent systems and relate those outputs to their own cultural identity and historical context.
- Teachers and students should receive training in artificial intelligence literacy in order to develop the skills required to understand, use, evaluate, and interact with artificial intelligence in a critical, responsible, and ethical manner. International experiences and established practices in this field may also provide useful models for developing appropriate training programmes.

In conclusion, art education supported by intelligent systems may shift from a tool of empowerment to a source of epistemic alienation if it is not governed by critical and culturally informed frameworks. Preserving cultural particularity and artistic identity in the age of artificial intelligence is therefore not merely an intellectual concern, but a necessary condition for safeguarding the culture

al and creative diversity of humanity as a whole.

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