



The Mediating Role of Learning Accessibility in the Relationship between Learning Styles and Students' Intentions to Engage with Online Art Education

^{1*} Yang MinLi  , ² Lee Keok Cheong 

City Graduate School, Faculty of Education, Citi University Malaysia, <Malaysia,

*Corresponding Author: lee.cheong@city.edu.my

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ABSTRACT

This conceptual paper explores the mediating role of learning accessibility in the relationship between learning styles and students' intentions to engage with online art education. The advent of digital learning environments presents unique challenges and opportunities for art education, demanding a re-evaluation of pedagogical approaches to accommodate diverse learning preferences. This paper propose a theoretical model that posits learning accessibility as a crucial link between the inherent learning styles of students and their propensity to undertake online art education. Through an extensive literature review, the paper discusses various learning styles and examines how the principles of accessibility in online education can be tailored to enhance student engagement. It argues that accessible learning design, when aligned with students' learning styles, has the potential to significantly influence their educational choices and motivation. The model emphasizes the importance of customizable and flexible learning environments that can cater to a spectrum of learning styles, thereby promoting higher engagement in online art education. The discussion offers insights into how educational institutions and online platform developers can apply this understanding to create more inclusive and effective educational experiences. The paper contributes to the ongoing dialogue about educational innovation and inclusivity, advocating for a design philosophy that embraces diversity in learning preferences as a cornerstone for the future of art education.

1. Introduction

The advent of the digital age has been a catalyst for transformation across numerous domains, with education standing as one of the most significantly impacted (Bozkurt, 2020). The shift from chalkboards to interactive whiteboards, from physical textbooks to digital resources, marks just the beginning of this paradigm shift. In the arts, traditionally characterized by hands-on and sensory-rich experiences, the digital revolution has paved the way for a novel form of dissemination: online art education. This innovative mode of learning transcends geographical barriers, democratizing access to high-quality artistic training.

However, the promise of online art education is not without its complexities. Learning in a digital space introduces variability in student experiences, outcomes, and levels of engagement (Cerratto Pargman, 2020). A critical factor contributing to this variability is the diverse array of learning styles—cognitive blueprints that influence how individuals process, comprehend, and retain information (Zhao et al., 2020). From the visual learner who thrives on imagery to the kinesthetic learner who grasps concepts through motion, the online environment challenges traditional pedagogical strategies.

Further complicating this scenario is the accessibility of online learning platforms. Accessibility, in this context, refers not only to the user-friendliness of digital interfaces but also to the extent to which these platforms cater to the multifaceted needs of a diverse learner population (Pyae et al., 2023). It encompasses the availability of resources, the adaptability of content to various devices, and the inclusivity of different abilities and preferences.

Given this backdrop, the impetus of this paper is to dissect and theorize how these elements—learning styles and learning accessibility—interact to influence a student's intention to participate in online art education. This paper propose that accessibility acts as a mediating force: it can bridge the gap between a student's learning style and their engagement with online art instruction, or it can widen this gap, depending on how well the learning environment is constructed.

This paper aims to craft a conceptual lens through which we can view and understand this dynamic. It seeks to provide educators, curriculum designers, and technologists with a theoretical foundation upon which to build more effective and engaging online art education platforms. By examining the interplay between learning styles, accessibility, and engagement, this paper aspires to contribute to the enhancement of educational practices and to support the flourishing of art education in the digital realm.

2. Literature Review

The phenomenon of online learning has seen a meteoric rise in China, catalyzed by a confluence of technological progress, governmental support, and educational demands (Johnson et al., 2016). With the Chinese government's strategic promotion of online education, there has been a concerted effort to bolster the pillars of educational accessibility, equity, and quality (Huang, 2020). The onset of the COVID-19 pandemic accelerated this digital shift, prompting the government to endorse online learning as an essential tool for uninterrupted education. This policy thrust was complemented by financial stimuli aimed at harmonizing online and traditional educational methodologies. The emergence of online platforms like XuetangX and Coursera has been emblematic of this shift, offering a broad spectrum of courses, including those in arts education (Dang et al., 2019).

The inclination towards online art education in Guang Xi represents a microcosm of this broader trend, reflecting a nuanced interplay of regional engagement with national educational policies. This uptake in online art education is not merely a byproduct of increased digital fluency but is also indicative of the evolving pedagogical landscape, where convenience and customization have become pivotal (Watson, 2008). The capacity to tailor one's learning experience through the selection of specific art genres and techniques has made online education particularly attractive to Guang Xi's residents. This is especially salient for those in remote areas, for whom traditional access to art education might necessitate prohibitive travel.

The conceptualization of student engagement in online learning environments necessitates a thorough understanding of learning preferences, which can be effectively categorized by the VARK model—Visual, Auditory, Reading/Writing, Kinesthetic (Michael & Prithishkumar, 2014). This model serves as a framework within which educational strategies can be tailored to accommodate individual learning styles. For successful integration of the VARK paradigm into online art education, educators must not only discern students' preferred learning modalities but also adeptly craft and curate content to match these preferences.

This literature review underscores the imperative for educational content that accommodates diverse learning styles. Visual learners, for example, benefit from the integration of diagrams and imagery, while auditory learners engage more deeply with content presented through sound. Reading/writing learners assimilate knowledge effectively through text-based materials, and kinesthetic learners thrive on interactive, hands-on experiences. The online art education environment, with its inherent flexibility and capacity for diverse content delivery, offers an unprecedented opportunity to cater to these varied learning preferences. The adoption of multimedia resources, interactive forums, and immersive technologies like virtual reality, enables a more inclusive and comprehensive educational experience, thus promoting deeper engagement across the student spectrum.

The literature has extensively explored the concept of learning styles, particularly the VARK model, which categorizes learners based on their preferred sensory modalities: Visual, Auditory, Reading/Writing, and Kinesthetic. Studies have indicated that aligning instructional strategies with learning styles can enhance students' understanding and retention of information (Darmayanti et al., 2022; El-Sabagh, 2021). In the context of online education, research suggests that learning outcomes improve when educational technologies are employed in ways that complement these learning preferences (Abouzeid et al., 2021).

Accessibility within online education is critical to providing equitable learning opportunities. It encompasses not only the technical aspects, such as user interface design and availability of resources across devices but also content delivery methods that cater to diverse learning needs (Russ & Hamidi, 2021). Research by Cumming and Rose (2021) emphasizes the importance of Universal Design for Learning (UDL) in creating online courses that offer multiple means of engagement, representation, action, and expression.

Student engagement in online learning environments is multifaceted, involving behavioral, emotional, and cognitive aspects (Wong & Liem, 2021). Engagement is often linked to students' intentions to participate in online education, with motivation and willingness being key predictors of their sustained involvement (Koay & Poon, 2022). The literature also recognizes that students' intentions to engage are influenced by the perceived quality and relevance of online courses.

Few studies have specifically addressed the interrelationship between learning styles, learning accessibility, and online learning intentions. However, existing research points toward a complex interaction where accessibility could mediate the relationship between learning styles and engagement intentions. For example, Al-Azawei et al. (2016) argue that accessible design tailored to different learning styles can positively influence students' motivation and engagement with online courses. Similarly, Almusharraf and Khahro (2020) found that when online environments are adapted to various learning styles, students report higher satisfaction and intent to continue using online learning resources.

In summary, the literature suggests that while there is a broad understanding of the individual impact of learning styles and accessibility on online education, the mediating role of learning accessibility on the relationship between learning styles and students' intentions to engage with online art education remains underexplored. This gap presents an opportunity for further research to develop a more nuanced understanding of how these variables interact and to design more effective online learning experiences accordingly.

3. Conceptual Framework

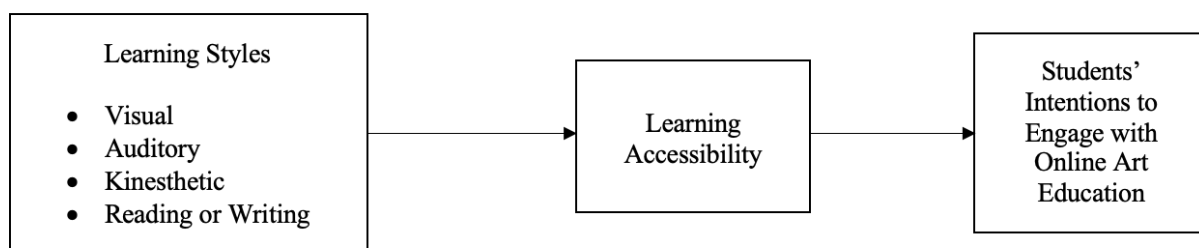


Figure 1: Conceptual Framework

The conceptual framework outlines a relationship between three core elements: learning styles, learning accessibility, and students' intentions to engage with online art education.

Different learning styles that are considered in this framework is listed: Visual, Auditory, Kinesthetic, and Reading or Writing. These styles represent the preferred ways that students process and understand information. Visual learners prefer to see and visualize the information, auditory learners comprehend better through listening, kinesthetic learners prefer doing and moving, and reading/writing learners favor information displayed as words (Dantas & Cunha, 2020). These are based on the VARK model, which categorizes students according to the mode of information that they most effectively assimilate.

Learning Accessibility, the mediating variables which is in the central box. Learning accessibility refers to the ease with which learners can access and engage with educational content. In the context of online art education, this could involve the availability of course materials in various formats suitable for different learning styles, the adaptability of the learning platform to various devices and user needs, and the overall user-friendliness and navigability of the online learning environment (Zhang et al., 2020).

Students' Intentions to Engage with Online Art Education represents the outcome variable. It refers to the willingness or motivation of students to participate in online art education programs (Agu, 2021). This is influenced by how well the learning environment caters to their learning style and how accessible they find the online resources.

The first arrow from "Learning Styles" to "Learning Accessibility" suggests that the learning environment should be designed considering the diverse learning styles to be accessible. It implies that there is a direct relationship between

the learning styles of students and the level of learning accessibility provided by the online art education platform. The second arrow from "Learning Accessibility" to "Students' Intentions to Engage with Online Art Education" suggests that the degree of learning accessibility influences students' intentions to engage with the education offered. If the online learning environment is accessible and accommodates their learning style, students are more likely to be motivated to engage with the online art courses.

The framework posits that "Learning Accessibility" mediates the relationship between "Learning Styles" and "Students' Intentions to Engage with Online Art Education." It assumes that if the online learning environment is well-adapted to various learning styles (thereby being more accessible), it will positively impact students' intentions to engage with online art education. Conversely, if the learning environment is not accessible or does not accommodate various learning styles, students may be less inclined to engage.

4. Discussion

The proposed conceptual framework serves as a theoretical lens to examine how the interplay between learning styles and learning accessibility might influence students' intentions to engage with online art education. The discussion herein extends this examination by considering the practical implications of this framework for the design and implementation of online art education platforms, as well as addressing potential challenges and limitations.

In practice, the framework suggests that online art education platforms should be designed with a strong emphasis on accommodating various learning styles. This entails providing visual elements such as high-quality images and video for visual learners, audio commentary for auditory learners, interactive modules or virtual reality settings for kinesthetic learners, and comprehensive text-based materials for reading/writing learners. Such a design philosophy aligns with the principles of Universal Design for Learning (UDL), which advocates for the creation of educational environments that can be accessed, understood, and used to the greatest extent possible by all people regardless of their age, size, ability, or disability. By integrating UDL principles, online art education can become more inclusive and effective.

Moreover, a commitment to learning accessibility means that these platforms should be user-friendly and intuitive, minimizing technical barriers that could deter engagement. When students find an online learning environment that resonates with their individual learning preferences and offers seamless access to resources, their motivation to engage with the content is likely to increase. This, in turn, can lead to improved educational outcomes and a more satisfying learning experience.

A collaborative approach to the development of online art education platforms is crucial. Art educators bring an understanding of pedagogical requirements and subject matter expertise, while designers and technologists contribute knowledge of user experience and interactive functionalities. Together, they can create online learning experiences that not only are pedagogically sound but also meet the diverse needs of learners. Furthermore, involving students in the design process can provide direct insights into their learning preferences and accessibility needs, leading to more user-centered platforms.

5. Conclusion

The discussion around the proposed conceptual framework highlights its potential to inform the development of more engaging and accessible online art education. It recognizes the importance of a collaborative design process and the need to address the challenges inherent in validating and applying such a framework. Ultimately, the discussion reiterates the framework's value as a starting point for creating online educational environments that cater to a broad range of learners, fostering an inclusive and engaging atmosphere conducive to the study of art.

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