The Influence of Assessment Criteria on Students' Results in Art and Design Learning Innhigher Colleges in Jiangxi, China

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Abstract
This paper seeks to measure the effect of implementation and art and design education in higher institutions in the Jiangxi Province of China. The introductory paragraph outlines the transformational nature of art and design education methodology, where industry-related education values are in abundance and collaborative practice-based assessment tools are used. The method section starts with a description of the research philosophical framework that is based on interpretivism as well as the popularity of qualitative research to elaborate the intricacies of evaluation in the given context. Through thematic analysis conceptual pillars, components, effects and evaluation approaches in art and design education are unveiled. The issues range from adopting new approaches to teaching and applying modern hardware and software, such as VR and ICT, among others. However, the potentials lie in applying innovative teaching models as well as utilizing AI and AR to dynamize the learning process. Based on discussing these challenges, provider recommendations for overcoming them and the usefulness of assessment practices that improve teaching and learning in art and design education are provided. Generally speaking, the results of this investigation add up to significant data that make art and design instruction in higher education research.
Keywords: Art and Design Education, Assessment Practices, Higher Education, Emerging Technologies, Teaching Methods

Introduction
Jiangxi University's art and design education heritage is outlined with a focus on the application-oriented and practical education forms gradually gaining ground. It again emphasizes that the only way toward better art is to follow these changing needs. The study's background information and problem statements are provided in the introduction, together

with the objectives, research questions and hypotheses. The latter are also discussed, and a section dealing with limitations, scope and delimitations is included. It implies that a theoretical framework of research will be provided in this way, and it will be used to create a complete picture of the motives of the study and further studies in this area in Chinese higher colleges in Jiangxi.

The transformation trend of art and design education in China, Jiangxi province in particular, demonstrates a transition towards industry-related education value, which provides an opportunity for students to be creative and solve problems (Liang & Wang, 2020). Until recently, students in art and design held written exams as assessment tools, but the effect of practice-based art and design education has encountered the necessity of finding appropriate alternative assessment tools. This study intends to investigate the efficacy of the conventional evaluation approach in art and design education with Jiangxi province as an example. Using the mixed-methods approach, the current methods will be analyzed and their effectiveness, challenges, and areas for improvement can be better understood. Evaluating student learning and their feedback especially based on an assessment of their application and practice converge into educators' emerging approaches (Campo, 2022). Through the combination of traditional aesthetics and the adoption of contemporary methods, the education of art and design in Jianxi highlights the notion that even though teaching methods should be tailored to students' perceptions and beliefs, finding a balance in between is of the utmost importance. Tackling with the complexities of stress from deadlines and how to maintain the optimal balance of the rewards that come from the intrinsic drive of oneself and those that come from outside is a tough task in the process of creating a learning environment where artistic creativity is soaring high.

The problem is that the indicators used to assess art and design education in China are the same as before, yet the stress on real practice and active participation is also increasing. Traditionally, art and design teaching emphasize writing tests more and theoretical knowledge. That is aqueous to evaluate a student's skills and creativity in practice (Radianti et al., 2020). It can be observed this is the gap that makes students difficult to use it efficiently and at the same time gives a small room to exhibit their skills. In addition, such kind of evaluation is subjective and generally, there are not any particular standards. Even more, the problem is very prominent. One way to solve these problems is to change the kind of assessment that is used towards evaluation techniques that correspond with the pragmatic aspect of the school program (Aminah & Cahyono, 2022). These strategies propose a systematic assessment framework that has to be subjective-criterion and objective-criterion-based and support modern assessments like peer reviewing and portfolio assessments. Through these manners, educators will be empowered to evaluate students' competencies in the real world and their skills better. This in turn will ensure a more productive and equitable learning process in the arena of art and design education in the future (Denvir & Briceland, 2023).
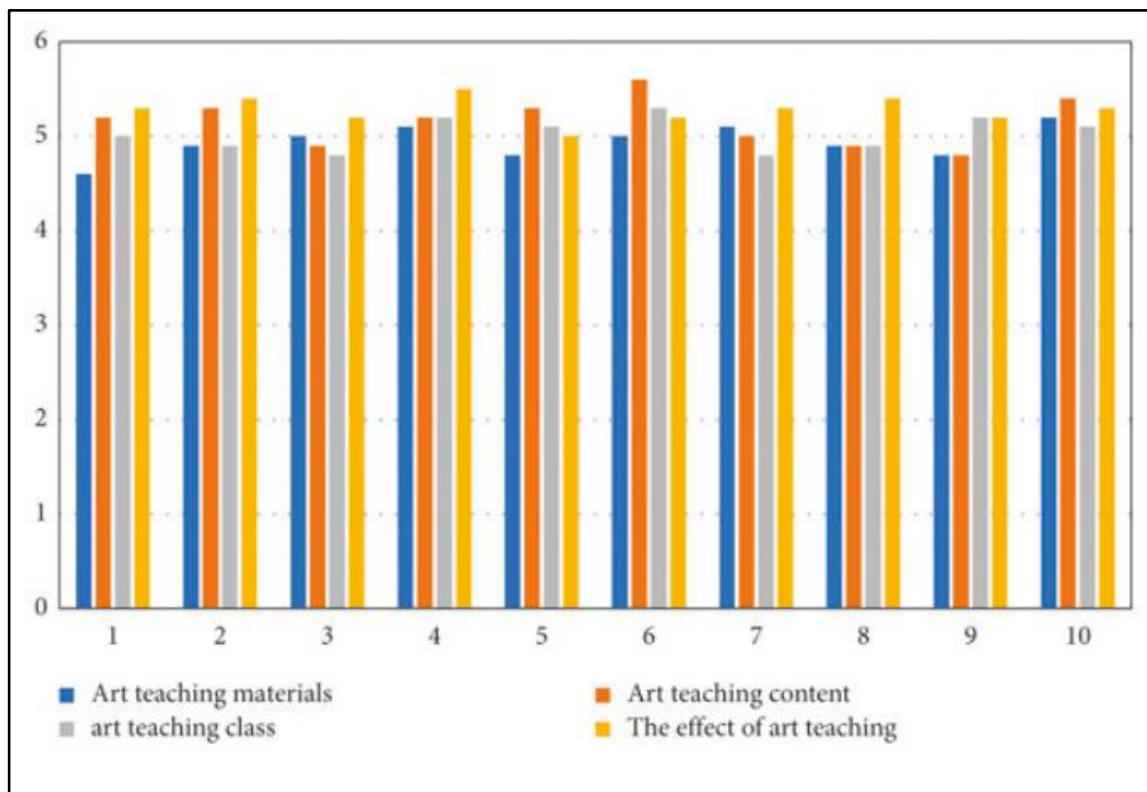
Figure 1: Art Classroom Teaching Evaluation
(Source: Denvir & Briceland, 2023)

This theoretical framework describes two main theories Skeptic Stage Theory and Social Cognitive Theory, which indicate a transition from teaching on theory into apprenticeship and practical application. The Theory of Concern Stages describes how teachers progress from self-reflection to teaching and passing judgment on their impacts. Thus, the concordance stage and impact assessment are filled by teaching tasks and self-reflection (Kwee, 2020). Latent in Social Cognitive Theory is the function of self-efficacy in Interactive Teaching which is very significant for arousing creativity and innovative spirit that are vital in Art and Design Education. The model conceptualizes how these theories are both along educational practitioners' existential concerns regarding traditional assessment techniques and the aesthetic domain, which finally guide the process of the instruction practice teaching methods (Meyer & Norman, 2020). Latest studies conducted in China show a trend in art and design education where alternative assessment procedures have the preference and demands for manipulatable appraisal systems and acceptable standards for students' skills are growing (Gómez & Valdés, 2019).
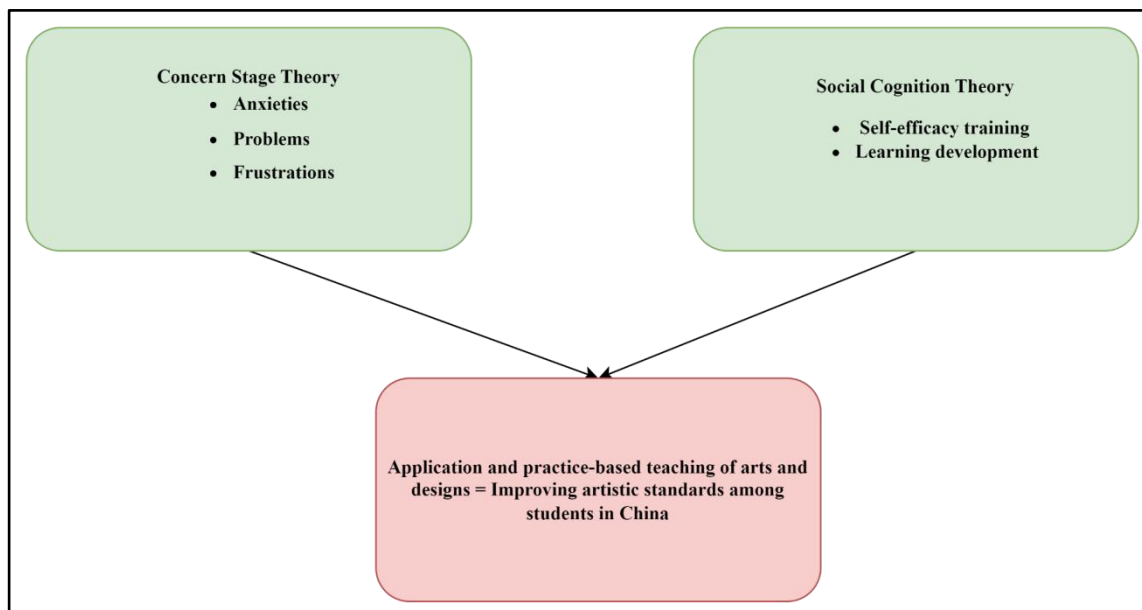
Figure 2: Theoretical framework
(Source: created by the researcher)

The given operational definitions contain the key ideas, for instance, art and design education, visual analysis, critical thinking, cognitive skills, communication, artistic philosophy, assessment process, natural designs with typical instruction, and natural art education (Petrov & Atanasova, 2020). Hence, authority is provided to the tacit knowledge and creative processes in the teaching-learning process of arts and design. Ethical consideration of this matter acknowledges the significance of preserving the confidentiality and privacy of the research participants (Wijayanti, 2022). Restricting access to right and accurate information secondary to time and resource scarcity might set challenges to the project direction, and delimiting the study indulges in the evaluation of application and practice in Chinese art and design education which is the main focus of the paper.

Objectives
- To identify the issues with application and practice evaluation in the teaching of art and design in higher education
- To investigate the elements affecting the evaluation of application and practice in the art and design education
- To examine the impact of application and practice evaluation in the teaching of art and design in higher education
- To evaluate the ways for the assessment of application and practice in the teaching and art design in higher education
- To provide recommendations for improving the assessment of application and practice in the teaching of art and design in higher education

Method
This research adopted an interpretive research philosophy, whose essence lies in interpreting subjective meaning tags of events, as well as understanding and describing social constructs that people experience (Zhao, 2020). To describe the ways of application and its use in higher colleges of teaching art and design in Jiangxi Province, China, one could use interpretivism to do a thorough research of the interactive and diverse factors that operate for the assessment

process. It states that the evaluation of outcomes and the method are determined by cultural, social and context features that are found in Jiangxi School. By combining the interpretive approach, the study seeks to understand what is significant, the perception and the perspective the diverse stakeholders in art and design education have. Having this philosophy, the researcher can employ both quantitative and qualitative methods of data gathering, like interviews, observations, and document analysis, to study how the assessment process, in the long run, affects schools, students, and parents. Interpretivism as a methodology matches the intrinsic discovery that this kind of research work implies, showing this need to reflect a wide range of views and interpretations to make informed recommendations needed to improve results.
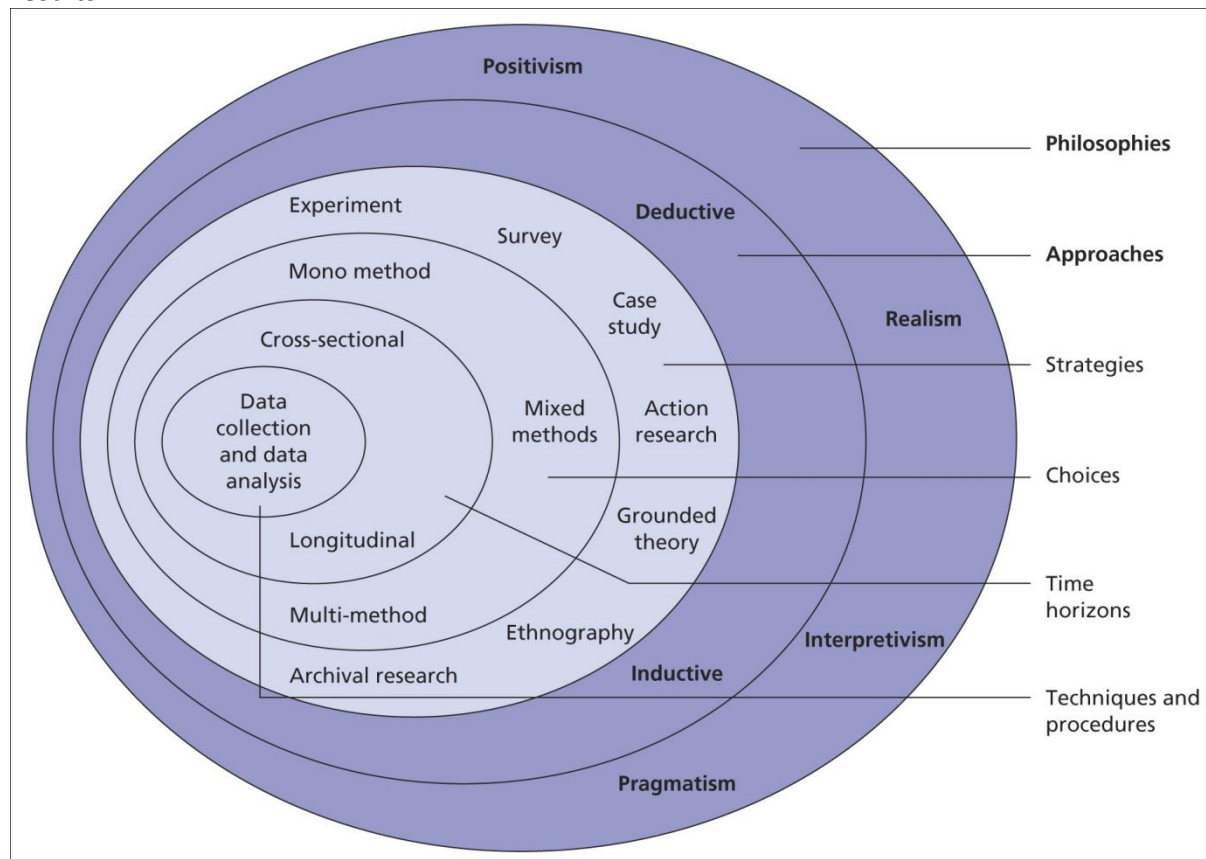

Figure 3: Research Onion
(Source: Sunders, 2020)

The research here is in the inductive vein. It is a technique that involves collecting specific data and information before it is used to derive broad, generalizable conclusions from them. Concerning analyzing the application and practice of art design in higher universities in Jiangxi province, an inductive approach that would go from the bottom up allows for a complete review of the assessment (Shamsuzzoha et al., 2021). Through monitoring issues, elements, and outcomes the researcher will progressively develop the knowledge of investigating the world of examination in this case. Inductive reasoning mode helps you to discover what the themes, trends, and relationships within the data could be bringing you to the making of conclusions and a guideline. Such methodology stands as a systematic tool for bringing out hidden layers and intricacies of the appraisal of art and design education, particularly in Jiangxi which is home to big multicultural diversity and lively arts. This logical induction

approach helps practically lay the ground underlying the results of the study by empirical studies as well as provides a guideline that is reflective of the context.

This study applies an exploratory research design to examine the multiple components that are involved in the process of student assessment through in-class application practices and additional practice assignments at art and design colleges in Jiangxi Province, China. Through this design, the researcher aims to let the reader not only show what takes part in assessment at the moment and to explain why problems exist, what elements are in it, and how it is built, but also to explain how the specified elements affect the teaching outcomes directly. This is made sure by bringing together qualitative and quantitative data collection methods, say, interviews, surveys, and observational studies which allow for an integral exploration of the different sides of assessment shapes in art and design education. With this type of model, scientists can discover the relationship between two or more variables and can see the details of the interaction mechanism of assessment practices in Jiangxi institutions of higher learning more clearly. In the end, the explorative research design is a valuable tool to thoroughly process assessment methods and to go further by presenting informed suggestions and strategies that will lead to better teaching effectiveness and students' learning achievements (Chaudhry et al., 2023).

This study takes a qualitative research approach to explore profoundly the feelings, views and tastes in which the assessment processes are examined when the art and design program is taught in higher colleges in Jiangxi, China. Qualitative techniques like interviews, focus groups, and document analysis are applied to get deep, detailed data from major participants which include teachers, students, and inheritors of the administration. Adopting the method in which the researcher can engage qualitative aspects, the researcher will portray the sophisticated nature of assessment with intertwining subtleties of the challenges, factors, and impacts that are involved. Alongside that, qualitative research methods help the researcher look under the covers of the different views, interpretations, and angles related to the examination process (Aguilar Solano, 2020). The study intends to use this methodology to enrich understanding and to be able to come up with suggestions that can help the assessment of the application of principles and practice in art and design at the art and higher colleges in Jiangxi, China.

In this research, research using qualitative data obtained secondarily. The sources include academic journals, websites, and reports all of which are related to the Art and Design Higher Colleges of Jiangxi, China. Using these sources of information, teachers gain deeper insight into different aspects of the art and design learning process which include, but are not limited to, understanding the scope of the application and implementation of various art and design techniques in practical settings. Magazines offer articles reviewed by their peers discussing some issues surrounding assessment such as methods, approaches, and challenges (Buchanan et al., 2021). The websites of educational institutions, government bureaus, and the professional community provide updates on the latest practices, policies and actions that are being taken in the area of art and design education in Jingxi. Studies carried out by education institutions bodies collectively provide information that is based on research along with application case studies and success stories. Data can be collected from a wide range of secondary sources thus considering the bigger picture concluded a qualitative assessment of the assessment environment of this academic sector and also produced informed

recommendations that are forward-looking. This means that the existing information on the topic and the scholarship are incorporated into the research to make it valid, reliable and relevant to the issue it is addressing.

Thematic analysis has been the emergent technique for the interpretation of the secondary qualitative data in the present study. Across this avenue, reoccurrence, seasonal patterns and other canvases into detecting evaluation in art and creative learning school education will be fully explored. The thematic analysis is a categorization of data that is done systematically and codified as per the objectives of the study and developing themes (Peel, 2020). This only adds to the advantages of the exploratory interconnection model in that it can address in-depth issues with the help of reflective insight extraction. It refers to a methodology that is cautiously flexible but at the same time, scientific as it encompasses qualitative data analysis. It is the one where all of the indexes are custom-tailored for the discovery of the central elements that have the greatest effect on the evaluation exercise in the higher education system. Thematic analysis guarantees that research findings are data-based and on-target with the purposes set in the research, thus enhancing the study's conclusion's validity and credibility.

Findings
Theme 1: The issues with application and practice evaluation in the teaching of art and design in higher education

Looking into the main themes that came up in the research on the role of art which combines both theory and practice in higher education resulted in some specific difficulties and other conditions. To begin with, integrating novel teaching methodologies, such as will enable enriching student involvement, achievement, and understanding across disciplines (Al-Samarraie et al., 2020). However, instructors and learners might be affected by the need to have sufficient time to research the online materials before they can use them effectively.

The use of VR technology involves VR applications that contribute to expanding the scope of learning experiences in higher education to learn by doing (Radianti et al., 2020). Whereas such results are excellent, VR applications still have to be fitted into learning theories and the evaluation of educational VR applications in most cases gives out only usability assessments rather than the learning outcomes. This lays the groundwork for working on the creation of a more complete document that will contain different ways of using VR in the educational process.

Another important use of ICT in the classroom process is making it possible to benefit students' learning outcomes (Alonso-García et al., 2019). On the one hand, this needs to be done through the use of ICT integration in teaching methodologies keeping SDGs in mind. Virtual Learning Environments (VLEs) become a primary technology utilized in good teaching practices signifying the fact that teachers not only should but also must take advantage of available technology to improve learning experiences.

Generally where thematic analysis is done, it becomes evident that the challenges concerning such teaching methods and technologies like immersive technology and ICT, need to be looked into in art and design education. Such problems can be addressed this way, and educators can create learning environments that are more engaging and effective by aligning curricula with the emerging demands of students and society.

Theme 2. The elements affecting the evaluation of application and practice in the art and design education

The matters of the elements playing a role in the evaluation of teaching practices and implementation of digital technology being used in the learning situation are found to be the main elements in the thematic analysis that explain teaching practices being performed correctly and integrating digital technology in the context of education. To begin with, design training faces challenges in completely preparing the students for the widespread industry complexity, which is encountered in the profession (Meyer & Norman, 2020). It undermines the situation when academic institutions do not bring students up to speed with the designer's processes and perspectives leading to blind adaptation in community garments. It also underlines the necessity of revisiting the designs and taking into consideration the best specifications from other learned professionals to help enhance educational outcomes.

One of the main factors that contribute to the way teachers use digital technology in education is their capabilities regarding this technology (Spiteri & Chang Rundgren, 2020). Thus, their attitudes towards using digital technology as well as their knowledge and skills also play a significant role. Teachers need to be trained in and equipped with the necessary principles to successfully (or seamlessly) apply technology in their classroom, otherwise, the generation that goes through the old school system will not be ready to fully satisfy the requirements of the "new era"'s information. As a result, those teaching-learning assistant centres are required to design teachers' training programs that will direct how technology is used and understand the main purposes. Besides that, the introduction of virtual realm (VR) in the educational process enables a learning process to be detected and experienced by students in a very creative way (Radianti et al., 2020). However, a consistent issue from considering learning theories during VR designing as well as evaluating VR applications through learning results needs attention. VR may prove to be a powerful tool in the future but the main application at the moment is just in the form of experiments, and not as a medium of an everyday class. The closure of the gaps can be done by a more comprehensive system of VR integration into the educational context, taking into account learning design, which reacts to learning principles and its impact is assessed based on student learning outcomes.

The following thematic analysis shows the need to consider different factors like curriculum design, teaching methods, etc. that ultimately lead to its of application and practice in art and design education. Through this way, instructors would be able to raise productivity and students would be able to acquire the avant-garde skills and knowledge for economic success in the modern world.

Theme 3. The impact of application and practice evaluation in the teaching of art and design in higher education

Thematically, the paper highlights the impact of application, and practice evaluation in college education concerning the infusion of evolving technologies and distance education into educational practices by revealing the effective elements and challenges associated with them. In addition, augmented reality (AR) proposes a tool for the innovation and mission of teaching in the programs of teacher education (Sáez-López et al., 2020). It must overcome initial difficulties such as distraction, and time management, but still, AR makes students excited and talented in areas of interest. Ultimately, the research supports that educators

should be adequately trained first, to successfully create and apply AR-based education methods.

Artificial Intelligence in education (AIEd) can play an important role in implementing transformations and new processes in higher education (Zawacki-Richter et al., 2019). The review system underlines the low extent of AIEd engineers' involvement in educational practices, and the preponderance of the quantitative approach in empirical data. More attention is required to the investigation of ethical and educational issues, as well as, the pedagogical implications of AIEd and the synchronization of it with theoretical perspectives in education. At last, the first of many experiences that students had during the pandemic was their sudden transition from traditional classroom teaching to distance education, especially for art and design courses. This experience both positively and negatively affected students' perception (Dilmac, 2020). Although technology facilitates artistic production, students are faced with such problems as a lack of motivation, difficulty in making connections with peers, and more. This further highlights the need for proactive measures that go specifically to the requirements of art and design students who are studying remotely, to ensure that engagement and learning outcomes are maintained.

The theme analysis offers opportunities for AI, AR and distance education integration that can elevate the teaching methods in higher education, but it also addresses the drawbacks of distance learning and challenges for creative subjects like art and design. Through research and finding solutions to these impacts, instructors will successfully implement new resources in higher education to benefit learning.

Theme 4. The ways for the assessment of application and practice in the teaching and art design in higher education
Firstly, the flip classroom educational style alongside other innovative teaching approaches has received much recognition within the higher education sector (Simamora et al., 2020). The adaptation to the flipped classroom concept requires inverting the usual structure by providing instructional material online outside the class time and dedicating the class time to interactive activities. This strategy is expected to stimulate students' engagement, internal processing, attitude, performance, comprehension, and outcome. It takes time to watch the video or digital material because of the length, and instructors take a lot of time to prepare the study materials and students spend lots of time learning and mastering those. Secondly, the knot between assessment and feedback in the university system brings up complex core questions (Winstone & Boud, 2022). Assessment and feedback are often mixed, and hence the issues including the focus of students on grades as only the evaluation parameter, late feedback, handy comments and feedback over other course design processes are produced. Since the functions of feedback are damaged to protect learning cycles, models are proposed that give feedback the leading role in education cycles.

Lastly, cutting-edge artificial intelligence (AI) inventions can indeed serve as tools for the improvement of assessment practices education-wise (Holmes & Tuomi, 2022). AI systems in education (AIED) cover different parts of the system, which include learning and tutoring systems, adaptive systems, and individualized learning platforms. These systems are based on the different interpretations of AI and education that can break the traditional assessment methods and provide individual feedback to students, build portraits of their learning

patterns and help the learning process. On the positive side, AI might help teachers to identify students' weaknesses and develop precise and tailored educational solutions. However, it is important to be aware of possible problems with the AI system's synchronization with the teaching methods and educational standards. The discussion of this study emphasizes the need for instructors to explore innovative teaching modalities, which should disconnect assessment and feedback, and for the implementation of AI in education that will afford educators to enhance assessment techniques in higher education art and design teaching. Though many art and design educators have an idea of what is wrong, they do not always know how to fix these problems. By addressing these issues, educators can create a more efficient and interesting level of learning.

Discussion

The thematic analysis attests to complex aspects of the analysis of application and implementation in higher education of this teaching containing those points related to the research aims. Secondly, it specifies a list of problems that exist during the evaluation of the students and innovative teaching approach by pointing at difficulties of implementing, for example, the flipped classroom model, VR technology and ICT in the educational process. There are plenty of challenges that primary research like ours faces, starting from the time for research and preparation to the diversion and time management issues that are brought about by immersive technologies such as VR. In another vein, the analysis delves into the aspects shaping the applicability and performance assessment process, with a particular accent placed on the choice of curriculum models, the level of teaching staff preparation, and the technologies utilized. These are the fundamental pillars of this subject, and recognizing their relevance further ensures that appropriate teaching methods are employed to foster a productive learning environment.

On top of that, the thematic analysis is focused on the application and practice evaluation in art and design education, revealing the pros and cons that may appear due to the integration of ever-evolving technologies, as well as distance learning in academic activities. The relevance of augmented reality and artificial intelligence in education, specifically how important it is to properly train teachers, to meet ethical considerations and improve student engagement, is also recognized. The next part of the analysis discusses numerous approaches for testing and practice application among which are incorporating the innovations of teaching models creating a separation between the assessment and feedback process, and making use of AI in education. Such approaches may offer alternative and innovative ways of enhancing the assessment process, however, it is important to solve the in-between problems and stay focused on the goals and principles of education. Finally, the thematic analysis gives very good information about the difficulties, factors, influences and evaluation systems linked with embodying art and design in higher education. This evidence can then instruct the formation of strategies and proposals that would be quite building in nature and this in turn will develop better art and design education.

References

Aguilar Solano, M. (2020). Triangulation and trustworthiness: advancing research on public service interpreting through qualitative case study methodologies. *FITISPosInternational Journal. 2020; 7 (1): 31-52.* https://repositori.upf.edu/bitstream/handle/10230/44595/aguilar_fitispos_trian.pdf?sequence=1&isAllowed=y

Alonso-García, S., Aznar-Díaz, I., Caceres-Reche, M. P., Trujillo-Torres, J. M., & Romero-Rodriguez, J. M. (2019). Systematic review of good teaching practices with ICT in Spanish Higher Education. Trends and Challenges for Sustainability. *Sustainability*, *11*(24), 7150. https://www.mdpi.com/2071-1050/11/24/7150

Al-Samarraie, H., Shamsuddin, A., & Alzahrani, A. I. (2020). A flipped classroom model in higher education: a review of the evidence across disciplines. *Educational Technology Research and Development*, *68*(3), 1017-1051. https://pureportal.coventry.ac.uk/files/31612861/Binder3.pdf

Aminah, N., & Cahyono, A. N. (2022). A Teaching Practice Design Based on a Computational Thinking Approach for Prospective Math Teachers Using Ed-Tech Apps. *International Journal of Interactive Mobile Technologies (IJIM)*, *16*(14), 43-62. https://www.academia.edu/download/90761139/11755.pdf

Buchanan, N. T., Perez, M., Prinstein, M. J., & Thurston, I. B. (2021). Upending racism in psychological science: Strategies to change how science is conducted, reported, reviewed, and disseminated. *American Psychologist*, *76*(7), 1097. https://www.apa.org/pubs/journals/features/amp-amp0000905.pdf

Campo, D. (2022). Female Education in a Chan Public Monastery in China: The Jiangxi Dajinshan Buddhist Academy for Nuns. *Religions*, *13*(11), 1020. https://www.mdpi.com/2077-1444/13/11/1020/pdf

Chaudhry, I. S., Sarwary, S. A. M., El Refae, G. A., & Chabchoub, H. (2023). Time to revisit existing student's performance evaluation approach in higher education sector in a new era of ChatGPT—a case study. *Cogent Education*, *10*(1), 2210461. https://www.tandfonline.com/doi/pdf/10.1080/2331186X.2023.2210461

Denvir, P., & Briceland, L. L. (2023). Exploring the Impact of an Innovative Peer Role-Play Simulation to Cultivate Student Pharmacists' Motivational Interviewing Skills. *Pharmacy*, *11*(4), 122. https://www.mdpi.com/2226-4787/11/4/122

Dilmaç, S. (2020). Students' Opinions about the Distance Education to Art and Design Courses in the Pandemic Process. *World Journal of Education*, *10*(3), 113-126. https://files.eric.ed.gov/fulltext/EJ1265350.pdf

Gómez, L. F., & Valdés, M. G. (2019). The Evaluation of Teacher Performance in Higher Education. Journal of Educational Psychology-Propositos y Representaciones, 7(2), 499-515.https://eric.ed.gov/?id=EJ1220554

Holmes, W., & Tuomi, I. (2022). State of the art and practice in AI in education. *European Journal of Education*, *57*(4), 542-570. https://onlinelibrary.wiley.com/doi/pdfdirect/10.1111/ejed.12533

Kwee, C. (2020). The application of career theories in teachers' professional development and career decision: A literature review. Universal Journal of Educational Research, 8(9), 3997-4008. https://www.researchgate.net/profile/Ching-Ting-Tany-Kwee-2/publication/354471620_The_Application_of_Career_Theories_in_Teachers'_Professional_Development_and_Career_Decision_A_Literature_Review/links/613a0034ee29a

068c711f3a9/The-Application-of-Career-Theories-in-Teachers-Professional-Development-and-Career-Decision-A-Literature-Review.pdf

Liang, S., & Wang, Q. (2020). Cultural and creative industries and urban (re) development in China. *Journal of Planning Literature*, *35*(1), 54-70. https://journals.sagepub.com/doi/pdf/10.1177/0885412219898290

Mardiana, S. (2020). Modifying research onion for information systems research. *Solid State Technology*, *63*(4), 5304-5313. https://www.researchgate.net/profile/Siti-Mardiana/publication/359542575_Modifying_Research_Onion_for_Information_Systems_Research/links/62432dc07931cc7ccf033406/Modifying-Research-Onion-for-Information-Systems-Research.pdf

Meyer, M. W., & Norman, D. (2020). Changing design education for the 21st century. *She Ji: The Journal of Design, Economics, and Innovation*, *6*(1), 13-49. https://www.sciencedirect.com/science/article/pii/S2405872620300046

Meyer, M. W., & Norman, D. (2020). Changing design education for the 21st century. *She Ji: The Journal of Design, Economics, and Innovation*, *6*(1), 13-49. https://www.sciencedirect.com/science/article/pii/S2405872620300046

Peel, K. L. (2020). A beginner's guide to applied educational research using thematic analysis. *Practical Assessment, Research, and Evaluation*, *25*(1), 2. https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1390&context=pare

Petrov, P. D., & Atanasova, T. V. (2020). The Effect of augmented reality on students' learning performance in stem education. *Information*, *11*(4), 209. https://www.mdpi.com/2078-2489/11/4/209/pdf

Radianti, J., Majchrzak, T. A., Fromm, J., & Wohlgenannt, I. (2020). A systematic review of immersive virtual reality applications for higher education: Design elements, lessons learned, and research agenda. *Computers & education*, *147*, 103778. https://www.sciencedirect.com/science/article/pii/S0360131519303276

Radianti, J., Majchrzak, T. A., Fromm, J., & Wohlgenannt, I. (2020). A systematic review of immersive virtual reality applications for higher education: Design elements, lessons learned, and research agenda. *Computers & education*, *147*, 103778. https://www.sciencedirect.com/science/article/pii/S0360131519303276

Radianti, J., Majchrzak, T. A., Fromm, J., & Wohlgenannt, I. (2020). A systematic review of immersive virtual reality applications for higher education: Design elements, lessons learned, and research agenda. Computers & Education, 147, 103778. https://www.sciencedirect.com/science/article/pii/S0360131519303276

Sáez-López, J. M., Cózar-Gutiérrez, R., González-Calero, J. A., & Gómez Carrasco, C. J. (2020). Augmented reality in higher education: An evaluation program in initial teacher training. *Education Sciences*, *10*(2), 26. https://www.mdpi.com/2227-7102/10/2/26

Shamsuzzoha, A., Nieminen, J., Piya, S., & Rutledge, K. (2021). Smart city for sustainable environment: A comparison of participatory strategies from Helsinki, Singapore and London. *Cities*, *114*, 103194. https://osuva.uwasa.fi/bitstream/handle/10024/12959/Osuva_Shamsuzzoha_Nieminen_Piya_Rutledge_2021.pdf?sequence=2&isAllowed=n

Simamora, R. M., De Fretes, D., Purba, E. D., & Pasaribu, D. (2020). Practices, challenges, and prospects of online learning during Covid-19 pandemic in higher education: Lecturer perspectives. *Studies in Learning and Teaching*, *1*(3), 185-208. https://scie-journal.com/index.php/SiLeT/article/download/45/36

Spiteri, M., & Chang Rundgren, S. N. (2020). Literature review on the factors affecting primary teachers' use of digital technology. *Technology, Knowledge and Learning*, *25*(1), 115-128. https://link.springer.com/article/10.1007/s10758-018-9376-x

Wijayanti, E. (2022). Teaching english by using canva: students' and lecturers' voice. *ENGLISH FRANCA: Academic Journal of English Language and Education*, *6*(2), 411-428. http://journal.iaincurup.ac.id/index.php/english/article/download/5709/1823

Winstone, N. E., & Boud, D. (2022). The need to disentangle assessment and feedback in higher education. *Studies in higher education*, *47*(3), 656-667. https://opus.lib.uts.edu.au/bitstream/10453/147928/3/00FE6CD5-5421-4CA9-B902-F3B4FF45F2EE%20am%20Combined%20.pdf

Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education–where are the educators?. *International Journal of Educational Technology in Higher Education*, *16*(1), 1-27. https://link.springer.com/article/10.1186/s41239-019-0171-0

Zhao, H. (2020). Explicating the social constructionist perspective on crisis communication and crisis management research: a review of communication and business journals. *Journal of Public Relations Research*, *32*(3-4), 98-119. https://www.tandfonline.com/doi/pdf/10.1080/1062726X.2020.1802732