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Research Article

Enhancing Online Art Education: Investigating the Impact of Teaching Presence on Student Performance at Qingdao Film Academy

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He Tian (Leo) is a graduate student at the Graduate School of Education, Trinity University of Asia, pursuing a Master of Arts in Education. With a specialization in the intersection of online education and art performance, his research focuses on enhancing online teaching strategies to improve cognitive, social, and teaching presences in art education. Before his academic journey at Trinity University, he gained professional experience in animation and creative media, enriching his understanding of digital and traditional art education. His work aims to contribute actionable insights for educators and institutions navigating the complexities of online learning in artistic disciplines. He is passionate about bridging the gap between technology and pedagogy to empower learners in creative fields.

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ABSTRACT

This study explored the impact of online teaching on students' art performance at Qingdao Film Academy, focusing on cognitive, social, and teaching presences. Employing a descriptive-correlational research design, the study examined how these dimensions influence academic performance. Findings revealed that teaching presence had the strongest positive correlation with art performance, emphasizing the importance of clear communication, timely feedback, and active facilitation. Social presence also played a significant role by fostering collaboration and a sense of community, while cognitive presence supported critical thinking and creative problem-solving. Despite the overall effectiveness of online teaching, challenges such as inconsistent access to resources and varying levels of engagement were noted. Recommendations include enhancing instructional strategies, fostering interactive online environments, and providing targeted support for underperforming students. These findings contribute to the ongoing discourse on optimizing online art education and highlight the need for adaptive teaching methodologies in digital learning environments.

Keywords: Online teaching, art education, cognitive presence, social presence, teaching presenceevaluation

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INTRODUCTION

In specialized areas like art education, where hands-on interaction traditionally plays a key role in learning and engagement, the shift to online teaching has fundamentally altered educational practices. Online learning challenges both students and educators to maintain an engaging, interactive, and meaningful educational environment. The lack of physical presence in a classroom setting makes it difficult to replicate the hands-on, collaborative experiences central to traditional art education [1].

When the transition to online platforms occurred, it was initially challenging for teachers and students to adapt to the virtual space in ways that were both stimulating and socially enriching. Studies suggest that maintaining teaching presence—active interaction, immediate feedback, and cleangar communication—plays a critical role in keeping students motivated and engaged in online learning environments [2]. Hodges et al. [3] emphasize that the rapid shift required educators to rethink instructional strategies to address these challenges effectively. These findings underscore the importance of structured approaches to online education to enhance student learning outcomes and engagement in specialized fields like art [4].

It can be hard for art students to switch to online classes because they often need to get feedback and practice in person. Bolzkurt and Sharma [5] say that new studies show we need a strong framework that helps students learn and connect with each other online. Different students need to be able to learn the same things, especially those who aren't doing well in school. Good teaching strategies that allow several learning styles can help with this [3]. In this research, we investigate how online instruction influences the cognitive, social, and teaching presences of art students. We also consider their academic performance in relation to these factors.

RELATED WORK

The shift to online education has significantly altered teaching and learning methodologies, especially in specialized fields like art education, which heavily rely on hands-on experiences and face-to-face interactions. Richardson et al. [6] highlight that cognitive presence in online learning can be enhanced when students are provided with meaningful and purposeful activities that promote critical thinking and reflection. However, the absence of physical studios and immediate instructor feedback can hinder this process in creative disciplines. This study by Yang *et al.* [7] found that enhancing online presence in blog-based courses significantly improves students' learning performance. Oztok and Brett [2] emphasize that online learning must prioritize both intellectual engagement and creativity to foster deeper understanding and artistic growth.

Social presence, which facilitates collaboration and interpersonal interactions, plays a critical role in maintaining student engagement in online art education. According to Martin et al. [8], students who feel connected and supported in an online environment are more likely to participate actively in learning activities and develop their artistic abilities. Social presence encourages collaboration, which is vital for art students as it mimics the communal and critique-driven environment of traditional studio classes. These findings indicate the necessity of creating online spaces that promote collaboration and interaction to support creative expression.

Teaching presence, characterized by instructor guidance, feedback, and facilitation, remains pivotal for successful online learning. Pawan et al. [9] emphasize the importance of timely and constructive feedback in guiding students through complex tasks, particularly in art education. Clear communication of objectives and expectations ensures that students remain focused and motivated. Furthermore, Hodges et al. [3] suggest that instructors play a crucial role in designing interactive and engaging learning experiences, which can bridge the gap between theoretical knowledge and practical application in online art education.

The accessibility and equity challenges of online art education have also been widely discussed. Farley and Burbules [10] underscore the disparities in access to essential tools, materials, and technology, which can create unequal learning experiences among students. Bedir Erişti and Freedman [11] adds that such challenges are particularly significant in creative disciplines, where specialized equipment is often needed for effective learning. Addressing these issues requires a comprehensive approach that includes inclusive strategies, additional resources, and personalized support to ensure that all students, regardless of background, can fully engage in online art education [12].

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METHODOLOGY

Research Design

This study investigated the association between online teaching strategies and academic performance of art students using a descriptive-correlational research approach. While the correlational element investigated the relationship between these elements and students' art performance, the descriptive approach sought to evaluate respondents' opinions on cognitive, social, and teaching presences in online learning. The main instrument of data collecting was a standardized questionnaire approved by professionals. Third-year artistic students participated in the study at Qingdao Film Academy. Mean scores, standard deviations, and Pearson correlation coefficients let one statistically evaluate the data.

Participants

The study included 298 third-year Qingdao Film Academy art students registering in several majors including animation, visual arts, photography, and directing. Deliberate selection was used to choose the participants with an eye toward students enrolled in online learning for the academic year 2022–2023. These students were selected since they reflected a variety of artistic fields and offered opinions on the success of online instruction in several art forms. Data were collected using a standardized questionnaire evaluating students' opinions on cognitive, social, and instructional presences in respect to their academic achievement.

Instrumentation

The study acquired its data via a structured questionnaire. Aiming at three main dimensions—Cognitive Presence, Social Presence, and Teaching Presence—the questionnaire aimed to gauge students' impressions of the online art basic training. It consists in Likert-scale questions with degrees ranging from "Strongly Disagree" to "Strongly Agree." A panel of four art education professionals evaluated the questionnaire, and following changes it was pilot tested on ten students from another university. The Cronbach Alpha Reliability Test affirmed the instrument's dependability by producing a coefficient of 0.83, therefore suggesting a great degree of internal consistency. This guaranteed the legitimacy and dependability of the data collecting tool.

Data Gathering Procedure

The validated questionnaires were sent to 298 third-year art students at Qingdao Film Academy during the second semester of the 2022–2023 academic year. To guarantee accessibility and ease of use, the surveys were sent online via email and class group chats Students had one week to finish and turn back the questionnaires. The researcher checked in with reminders meant to raise the response rate. Following collection, the finished questionnaires underwent statistical analysis with SPSS program to evaluate their validity and relevance of the results [13].

Data Analysis

The collected data were investigated using both Microsoft Office Excel and Jamovi to assess the respondents' impressions of online teaching and learning by means of descriptive statistical analysis including frequency distribution, mean, and standard deviation. We looked for significant changes based on demographic factors by means of inferential statistics—including t-tests and Pearson correlation—between variables. The Cronbach's alpha reliability test was conducted using Jamovi, yielding a coefficient of 0.83, which indicates strong internal consistency. Excel was particularly useful for organizing and calculating data, while Jamovi allowed for more advanced statistical tests and visualization [7].

RESULT & DISCUSSION

Emphasizing cognitive, social, and teaching presence, this part provides the findings of the participant evaluations of online learning. It also looks at the academic performance of the art

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students and the relationships between these presences and their performance with each table broken out and transitions supplied for clarity.

The table 1 below show the mean scores, standard deviations, and descriptive interpretations on the Implementation of Online Teaching in Learning Art Concepts in terms of Cognitive Presence.

Table 1. Mean Scores, Standard Deviation and Descriptive Interpretation on the Implementation of Online Teaching in Learning Art Concepts in terms of Cognitive Presence

Statements	Mean Score	Descriptive Interpretation	SD
1. Art related problems posted online increased my interest in course issues.	3.79	Very Good	1.07
2. Online activities piqued my curiosity and enriched my artistic knowledge.	3.80	Very Good	1.07
3. I felt motivated to explore art- related questions.	3.78	Very Good	1.06
4. I utilize a variety of information sources to explore problems posed related to art.	3.70	Very Good	1.05
5.Brainstorming and finding relevant information online helped me resolve art- related questions.	3.71	Very Good	1.05
6. Online discussions were valuable in helping me appreciate different perspectives in art.	3.72	Very Good	1.03
7. Combining new information helped me answer questions raised in art activities.	3.71	Very Good	1.02
8. Reflection on course content and discussions helped me understand fundamental concepts of art in this class.	3.74	Very Good	1.01
9. Online art-related activities helped me improve my imagination and artistic skills.	3.74	Very Good	1.03
10. Online reflection on course content and discussions helped me understand fundamental concepts of art in class.	3.76	Very Good	1.02
Overall Rating	**3.74**	**Very Good**	**0.96**

Legend:

Response Scale	Mean Rating Scale	Level of Agreement	Level of Quality
1	1.00-1.80	Strongly Disagree	Poor
2	1.81-2.60	Somewhat Disagree	Fair
3	2.61-3.40	Undecided	Good
4	3.41-4.20	Agree	Very Good
5	4.21-5.00	Strongly Agree	Excellent

Table 1 displays the respondents' evaluation of cognitive presence in online instruction using a mean score of 3.74 and a standard deviation of 0.96. Though it earned the lowest overall grade among other qualities, students assessed cognitive presence as "Very Good." This points to room for development in involving students cognitively in online learning.

An examination of social presence in the following table helps one to better grasp how the surroundings affected children.

Table 2. Mean Scores, Standard Deviation and Descriptive Interpretation on the Implementation of Online Teaching in Learning Art Concepts in terms of Social Presence

Statements	Mean Score	Descriptive Interpretation	SD
1.Getting to know other course participants gave me a sense of belonging in the course.	3.70	Very Good	1.05
2. I was able to form distinct impressions of some course	3.71	Very Good	1.04

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participants through our online meet and greet activity.			
3. Online or web-based communication is an excellent medium for social interaction.	3.76	Very Good	1.05
4. I felt comfortable conversing through the online medium.	3.78	Very Good	1.01
5. I felt comfortable participating in the online course discussions.	3.68	Very Good	1.05
6. I felt comfortable sharing work online with other course participants.	3.74	Very Good	1.05
7. I felt comfortable disagreeing with other course participants while still maintaining a sense of trust.	3.68	Very Good	1.02
8. I felt that my point of view was acknowledged by other course participants.	3.75	Very Good	1.02
9. Online discussions help me to develop a sense of collaboration	3.77	Very Good	1.02
10. I felt happy to see the other artworks of student through online art exhibits.	3.84	Very Good	1.03
Overall Rating	**3.74**	**Very Good**	**0.95**

Legend:

Response Scale	***Mean Rating Scale***	***Level of Agreement***	***Level of Quality***
1	*1.00-1.80*	*Strongly Disagree*	*Poor*
2	*1.81-2.60*	*Somewhat Disagree*	*Fair*
3	*2.61-3.40*	*Undecided*	*Good*
4	*3.41-4.20*	*Agree*	*Very Good*
5	*4.21-5.00*	*Strongly Agree*	*Excellent*

Table 2 presents the students' assessment of social presence in online teaching, with a mean score of 3.74 and a standard deviation of 0.95. Like cognitive presence, social presence was rated as "Very Good." The highest-rated aspect was the appreciation of peer artwork in online exhibits, whereas students were less comfortable with engaging in online discussions.

Now turning to Table 3, which looks at instructional presence with an eye toward teachers' capacity to assist online learning.

Table 3. Mean Scores, Standard Deviation and Descriptive Interpretation on the Implementation of Online Teaching in Learning Art Concepts in terms of Teaching Presence

Statements	**Mean Score**	**Descriptive Interpretation**	**SD**
1. The instructor clearly communicated important course topics.	3.81	Very Good	1.07
2. The instructor clearly communicated important course goals.	3.83	Very Good	1.04
3. The instructor provided clear instructions on how to participate in related art learning activities.	3.82	Very Good	1.03
4. The instructor clearly communicated important due dates/time frames for the different art assignments and activities.	3.82	Very Good	1.06
5. The instructors are helpful in identifying areas of agreement and disagreement on art topics that helped me to learn.	3.84	Very Good	1.01
6. The instructor is helpful in guiding the class towards understanding art topics in a way that helped me clarify my thinking.	3.81	Very Good	1.03

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7. The instructor helps to keep art students engaged and participating in productive dialogue.	3.87	Very Good	1.02
8.Instructor actions reinforced the development of a sense of online community among art students.	3.82	Very Good	1.00
9. The instructor provided feedback that helped me understand my strengths and weaknesses relative to the course's goals and objectives.	3.79	Very Good	1.03
10. The instructor provided feedback in a timely fashion.	3.85	Very Good	1.04
Overall Rating	**3.82**	**Very Good**	**1.00**

Legend:

Response Scale	**Mean Rating Scale**	**Level of Agreement**	**Level of Quality**
1	1.00-1.80	Strongly Disagree	Poor
2	1.81-2.60	Somewhat Disagree	Fair
3	2.61-3.40	Undecided	Good
4	3.41-4.20	Agree	Very Good
5	4.21-5.00	Strongly Agree	Excellent

Table 3 shows the respondents' evaluation of instructional presence; with a standard deviation of 1.00 and a highest mean score of 3.82, The instructor's capacity to keep pupils involved in meaningful conversation earned the best ratings. Engagement of students and learning results were seen to depend critically on teaching presence.

Beyond impressions of presence, the study looked at students' academic success. Table 4 lists respondents' art performance grade dispersion.

Table 4. Summary of the Mean Scores, Standard Deviation and Descriptive Interpretation on the Implementation of Online Teaching in Learning Art Concepts

Dimensions	**Mean Score**	**Descriptive Interpretation**	**SD**
Cognitive Presence	**3.74**	**Very Good**	**0.96**
Social Presence	**3.74**	**Very Good**	**0.95**
Teaching Presence	**3.82**	**Very Good**	**1.00**

From Table 4, it is shown that 34.9% of students got the best grade, and 36.6% got the normal grade. But 8.4% were rated "Poor," and 4.4% were rated "Very Poor." This means that these kids need more help.

The next part of the study looks into the link between cognitive present and how well students do in art, as shown in Table 5.

Table 5. Frequency and Percentage Distribution of Respondents According to Art Performance

Levels	**Frequency**	**Percentage**
Very Poor	13	4.4 %
Poor	25	8.4 %
Average	109	36.6 %
Good	104	34.9 %
Very Good	47	15.8 %
Total	298	100%

Table 5 indicates a robust positive correlation ($r = 0.904$, $p < .001$) between children's performance in art and their level of mental presence. Consequently, children who engage in more frequent contemplation typically excel in art class.

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Lastly, Table 6 looks at the connection between the teacher's presence and the student's artistic performance to find out more about how successful teaching affects student achievement.

Table 6. Test for Significant Relationships in the Assessment of the Respondents On the Implementation of Online Teaching in Learning Art Concepts to their Art Performance

Variable	Computed r	Interpretation	P-Value	Decision
Cognitive to Art Performance	0.904	Very Strong Positive	<.001	Reject Ho, sig*
Social to Art Performance	0.933	Very Strong Positive	<.001	Reject Ho, sig*
Teaching to Art Performance	0.883	Very Strong Positive	<.001	Reject Ho, sig*

Note: P < 0.05, significant

Table 6 shows that respondents from all age groups rated their performance as "Excellent," demonstrating consistently high-performance levels across all age categories. Table 6 demonstrates a positive connection ($r = 0.883$, $p < .001$) between instructional presence and artistic performance. This emphasizes the necessity of effective communication, constructive feedback, and instructor guidance in attaining optimal academic outcomes in art education.

All findings indicate that although students predominantly assessed cognitive, social, and teaching presences favorably, teaching presence exerted the most significant impact on student performance. Furthermore, robust relationships between these presences and artistic performance underscore the necessity of enhancing these aspects to promote superior educational outcomes in an online learning context.

The findings from Table 1 reveal the demographic profile of respondents, showing a significant gender disparity, with female students dominating the sample. This result aligns with the study of European Union who observed that creative industries, including arts, have seen a growing representation of women [14]. The predominance of female students underscores the importance of designing teaching strategies that address gender-specific learning preferences, particularly in an online context [15].

From Table 2, the age distribution reflects that most respondents are in their early twenties, a typical range for undergraduate students. This supports findings by Cranfield et al. [16], which highlight that this age group demonstrates high adaptability to digital platforms but may require structured guidance to maintain focus in online settings. Understanding this age dynamic is critical for tailoring online teaching methods to better suit the developmental stage of learners.

Table 3 emphasizes the diversity of art specializations, with animation emerging as the most popular. This mirrors trends noted by Yan [17], who reported a surge in animation's appeal due to growing demand in digital media. The relatively lower representation of "other" specializations highlights the potential to introduce emerging fields like interactive media to broaden students' career prospects.

The assessment of cognitive presence in Table 4 shows that students appreciated how online activities piqued their curiosity and enriched their artistic knowledge. These findings align with Akyol and Garrison [18], who emphasized the role of meaningful engagement in fostering critical thinking. However, the slightly lower ratings for utilizing diverse information sources indicate a need to incorporate more varied and dynamic materials to further support students' cognitive development [19].

Table 5 illustrates the significance of social presence, particularly through fostering collaboration via online discussions and art exhibits. Oztok and Brett [2] noted the vital role of a strong social presence in maintaining student motivation and reducing feelings of isolation in virtual settings. Nevertheless, the need to enhance comfort and trust during discussions suggests that creating a more inclusive environment remains a challenge.

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Finally, Table 6 highlights teaching presence as the most influential dimension on art performance. This finding is consistent with Martin et al. [8], who emphasized that clear communication, timely feedback, and active facilitation are pivotal in online learning. However, the results also underline the need for more personalized and constructive feedback to address individual learning gaps effectively [20].

Overall, the findings across all tables demonstrate that cognitive, social, and teaching presences significantly impact art performance, with teaching presence being the most influential. The results emphasize the need for continuous improvement in online teaching strategies, particularly in addressing the diverse needs of art students and fostering a more engaging, supportive, and inclusive learning environment.

CONCLUSIONS AND RECOMMENDATIONS

This study examined the effects of online instruction on students' cognitive, social, and teaching presences, along with their academic achievement in art education at Qingdao Film Academy. The findings demonstrated significant relationships among these three presences and student outcomes, underscoring the necessity of well-organized online teaching methodologies. Effective communication, prompt feedback, and the active involvement of educators are highlighted, with the presence of teaching exerting the most significant influence on student progress. Despite the generally positive perceptions of online education, the poll reveals disparities in student performance, highlighting the necessity for customized interventions for underperforming students.

The findings underscore the critical significance of teaching presence in enhancing student performance in an online environment and stress the necessity for continuous improvement of instructional strategies. By addressing the challenges of online art education, such as enhancing cognitive engagement and fostering a supportive online community, educators can markedly enhance student learning outcomes. Subsequent research may explore the complexities of these associations, particularly in other specialized fields that rely heavily on experiential learning.

Based on the findings, it is recommended that art educators and institutions prioritize the enhancement of teaching presence in online art education. Teachers may be trained to deliver clear instructions, provide timely and constructive feedback, and engage students in meaningful interactions. Investing in professional development programs focused on online pedagogy can ensure instructors are well-equipped to foster an effective virtual learning environment. Institutions could also develop and implement standardized protocols for online teaching to ensure consistency and quality in instruction.

Additionally, targeted strategies should be designed to improve social presence and provide greater support for underperforming students. Creating collaborative activities, peer feedback opportunities, and virtual meet-and-greet sessions can enhance students' sense of community and engagement. For struggling students, personalized interventions, such as mentoring programs, supplemental resources, and scaffolded learning tasks, may be introduced to address their specific challenges. Institutions should consider incorporating advanced technology platforms to facilitate these strategies, ensuring accessibility, inclusivity, and a seamless learning experience for all students. By addressing these recommendations, art educators and institutions can maximize the potential of online learning environments and elevate the quality of art education.

IMPLICATIONS

The findings of this study have significant implications for art education, particularly in the context of online teaching. The strong correlations between cognitive, social, and teaching presences and students' art performance highlight the importance of a well-rounded online learning environment. This suggests that educators and institutions must adopt holistic teaching strategies that integrate these dimensions to enhance students' academic success and engagement. By fostering active cognitive engagement, building collaborative social interactions, and ensuring effective teaching

practices, online education can overcome traditional limitations and provide a robust framework for learning art concepts.

The results emphasize the critical role of teaching presence in influencing art performance, underscoring the need for teacher training in online pedagogy. Teachers should be equipped with skills to provide clear communication, timely feedback, and active facilitation to ensure student success. Institutions offering art education programs may consider investing in professional development programs for instructors to strengthen their teaching presence in virtual settings. This is particularly important as online teaching becomes a staple in modern education.

Social presence also emerged as a key factor, suggesting the need for creating interactive and inclusive online communities. Building a sense of connection and trust among students can significantly improve their learning outcomes. Educators can employ collaborative projects, peer feedback mechanisms, and interactive online forums to strengthen social bonds and enhance engagement. Institutions should also develop digital tools and platforms that promote collaboration and ease of communication to support these initiatives.

Finally, the findings underscore the importance of targeted support for underperforming students. Tailored interventions such as tutoring programs, supplemental resources, and scaffolded learning activities are essential for addressing performance gaps. This approach ensures that online art education remains inclusive and accessible to all learners, regardless of their initial skill levels. By addressing these implications, the study provides a roadmap for optimizing online teaching practices in art education, fostering a culture of excellence and innovation.

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Author's Biography

He Tian (Leo) is a graduate student at the Graduate School of Education, Trinity University of Asia, pursuing a Master of Arts in Education. With a specialization in the intersection of online education and art performance, his research focuses on enhancing online teaching strategies to improve cognitive, social, and teaching presences in art education. Before his academic journey at Trinity University, he gained professional experience in animation and creative media, enriching his understanding of digital and traditional art education. His work aims to contribute actionable insights for educators and institutions navigating the complexities of online learning in artistic disciplines. He is passionate about bridging the gap between technology and pedagogy to empower learners in creative fields.

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Author Contributions Statement

Name of Author	C	M	So	Va	Fo	I	R	D	O	E	Vi	Su	P	Fu
He Tian	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Juliet A. Demalen	√	√	√	√	√	√	√	√	√	√	√	√	√	√

C:Conceptualization
M:Methodology
So:Software
Va:Validation
Fo:Formal analysis
I :Investigation
R:Resources
D:DataCuration
O : Writing-Original Draft
E:Writing-Review&Editing

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Vi:Visualization
Su:Supervision
P:Project administration
Fu:Funding acquisition

Data Availability
No new data were generated or analyzed in this study.