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# Influencing Factors of Online Learning Courses Satisfaction In Art Major: A Case Study of Chongqing, China

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## Abstract

**Purpose:** This study employs a mixed-methods approach to investigate online learning satisfaction of students in art education. It determines relationship between self-efficacy, content quality, interactivity, delivery method, social presence, and satisfaction with online learning course. **Research design, data, and methodology:** Qualitative methods include observations, interviews, and surveys, capturing insights into students' experiences and challenges. The target population is students, majoring in art at the School of Journalism and Communication, Sichuan International Studies University. Index of Item-Objective Congruence and pilot test were implemented to prove validity and reliability of the research items. The quantitative phase involves administering structured questionnaires to 80 students and analyzing data using SPSS. The strategic plan involves 30 students. **Results:** Integrating qualitative and quantitative findings, the study offers a comprehensive understanding of satisfaction in online art education. The paired-sample T-test analysis results for six variables related to student satisfaction, comparing the phases before and after implementing a strategic plan, has been found significant mean different. **Conclusions:** The research contributes to the discourse on online learning satisfaction, offering implications for designing effective online art education programs.

**Keywords:** Satisfaction, Online-Learning, Self-Efficacy, Content Quality, Interactivity

**JEL Classification Code:** I23, J28, L2

## 1. Introduction

Online learning in the field of arts education presents unique challenges and opportunities. This paper, with its significant findings, examines the factors influencing satisfaction with online art courses, particularly focusing on art majors in Chongqing, China. Combining qualitative and quantitative methodologies, the study provides a comprehensive understanding of the determinants of satisfaction in online art education. Through in-depth interviews and statistical analysis, the research identifies key factors such as self-efficacy, content quality, interactivity, social presence, and delivery method that significantly impact student satisfaction. The study also proposes strategic interventions to enhance satisfaction levels and evaluates the effectiveness of these interventions through pre- and post-implementation assessments. The findings, with their potential to inform curriculum design, instructional strategies, and policy-making decisions, contribute significantly to the enhancement of online art education.

Online learning has emerged as a significant mode of education, offering flexibility and accessibility to students worldwide. In the field of arts education, the transition to online platforms presents both challenges and opportunities. This paper explores the factors influencing satisfaction with online art courses, focusing on art majors in Chongqing, China. By combining qualitative and quantitative approaches, the study aims to provide insights into the unique dynamics of online art education and propose strategies for enhancing satisfaction levels.

Technological advancements and the demand for flexible education drive the rapid growth of online

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learning. Traditionally, arts education has relied heavily on hands-on practice, posing challenges for online delivery. However, online platforms offer opportunities for cross-cultural collaboration, personalized learning, and access to diverse resources. Effective course design and learner engagement are essential for facilitating meaningful interactions and supporting artistic development in online environments.

Global Context: The expansion of online learning is a global phenomenon that has implications for arts education worldwide. Ensuring the quality of online art courses is a shared concern among researchers and educational institutions globally. This study, with its focus on the specific challenges and opportunities in the field of arts education, contributes to the broader discourse on online education, making the audience feel connected to a global conversation.

Asian Context: In Chongqing, China, this study, with its unique insights gained from the cultural and educational context of the region, examines the factors influencing satisfaction with online art courses. By conducting in-depth interviews, the research aims to gain insights directly from participants and explore the nuances of online art education in Chongqing, making the audience feel intrigued and engaged in the specific context of Chongqing.

Statement of Problems： This research aims to unravel the intricacies that impact art majors' academic performance and satisfaction levels in online courses. By examining factors such as self-efficacy, content quality, interactivity, social presence, and delivery method, the study seeks to propose curriculum design recommendations tailored to optimize the educational experience for art majors.

Research Objective： The primary objective of this research is to identify the determinants of satisfaction in online art courses and propose strategies for enhancing satisfaction levels. Through a comprehensive analysis of factors influencing learning performance and satisfaction, the study aims to inform educational practices and interventions tailored to the unique needs of art majors.

Research Questions： The study addresses several research questions, including the significant influence of self-efficacy, content quality, interactivity, social presence, and delivery method on student satisfaction. It also examines current satisfaction levels and proposes intervention design implementations to improve satisfaction. Pre- and post-implementation assessments are conducted to determine the effectiveness of these interventions.

Scope of the Research: Focused on art majors in Chongqing, China, this study explores various factors affecting satisfaction with online learning courses. In-depth interviews and quantitative analysis are employed to collect and analyze data, ensuring a thorough exploration of participants' perspectives and experiences.

## 2. Literature Review

### 2.1 Self-Efficacy

Self-efficacy refers to belief in one's capabilities to organize and execute actions to achieve desired outcomes. Self-efficacy shapes individuals' beliefs about their capabilities, influencing their motivation and behavior across various contexts. Bandura (1977), Bandura (1997), Pajares (1996), Zimmerman (2000), and Schunk (1995) provide insights into the multifaceted nature of self-efficacy, emphasizing its role in human agency, motivation, and accomplishment.

**H1:** Self-efficacy has a significant effect on satisfaction with online learning course.

### 2.2 Content Quality

Content Quality pertains to educational materials' accuracy, relevance, and currency. Content quality is essential for effective learning experiences, as highlighted by Hodgins and Cohen (1996), Wiley (2000), McGreal and Elliott (2004), Duffy and Cunningham (1996), and Wang and Spence (2009). These scholars emphasize the importance of accurate, up-to-date, and relevant content in meeting learners' needs and goals.

**H2:** Content quality has a significant effect on satisfaction with online learning course.

### 2.3 Interactivity

Interactivity involves engagement with mediated environments and the extent of participation in communication exchanges. Interactivity plays a vital role in communication processes, as discussed by Hoffman and Novak (1996), Rafaeli (1988), McMillan and Hwang (2002), Biocca et al. (2003), and Webster and Trevino (1995). These scholars explore the dynamic nature of interactivity and its implications for user engagement in various communication contexts.

**H3:** Interactivity has a significant effect on satisfaction with online learning course.

### 2.4 Delivery Methods

Delivery methods encompass the organization and presentation of instructional materials, communication strategies, and overall structure in online education. Delivery methods significantly impact online learning experiences, as

described by Garrison and Kanuka (2004), Bates (2015), Means et al. (2010), Simonson et al. (2015), and Roblyer and Wiencke (2003). These scholars discuss the importance of instructional design, technology integration, and communication strategies in creating effective online learning environments.

**H4:** Delivery method has a significant effect on satisfaction with online learning course

### 2.5 Social Presence

Social presence refers to the perception of 'realness' and the prominence of interpersonal relationships in mediated communication. As highlighted by Gunawardena (1995), Short et al. (1976), Rourke et al. (1999), Kehrwald (2008), and Rourke et al. (1999), social presence is crucial for building online learning communities. These scholars emphasize the role of social presence in fostering engagement and collaboration among online learners.

**H5:** Social presence has a significant effect on satisfaction with online learning course.

### 2.6 Satisfaction

Satisfaction is the subjective evaluation of the overall online learning experience. Learner satisfaction is influenced by various factors, including course content, interaction, and instructor support, as discussed by Anderson and Lehman (1997), Liaw and Huang (2000), Sun et al. (2008), Selim (2007), and Al-Fraihat et al. (2020). Understanding and enhancing satisfaction is critical for improving the effectiveness of online education.

## 3. Research Methods and Materials

### 3.1 Research Framework

The researchers have integrated the theoretical frameworks of several scholars to construct their study's conceptual framework. Specifically, they have adopted:

The framework on Self-Efficacy and Satisfaction proposed by Bandura (1977).

The framework on Content Quality and Satisfaction from Wiley (2000).

The Framework on Delivery Methods and Satisfaction by Siritongthaworn et al. (2006).

The framework for Course Interactivity and Satisfaction was developed by Cheng (2020).

The framework on Social Presence and Satisfaction outlined by Mirabolghasemi et al. (2015).

The new conceptual framework, which encapsulates these elements, is depicted in Figure 1.

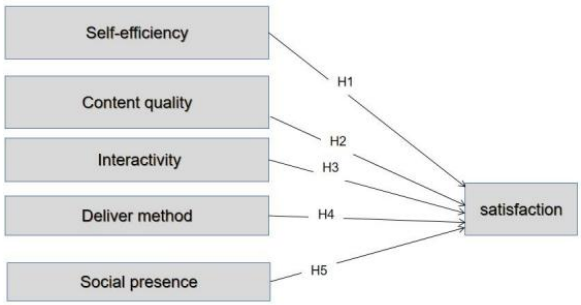


**Figure 1: Conceptual Framework**

**HI:** Self-efficacy has a significant effect on satisfaction with online learning course.

**H2:** Content quality has a significant effect on satisfaction with online learning course.

**H3:** Interactivity has a significant effect on satisfaction with online learning course.

**H4:** Delivery method has a significant effect on satisfaction with online learning course

**H5:** Social presence has a significant effect on satisfaction with online learning course.

### 3.2 Research Methodology

**Survey and Conceptual Framework Development:** The study began with a crucial step: conducting surveys across the entire study population (N=372). This initial data collection was instrumental in developing the proposed conceptual framework, laying the foundation for the entire study.

**Hypothesis Testing:** The data collected was subjected to a rigorous testing process. All hypotheses were tested using multiple linear regression analysis, with the significance of each determined against a p-value threshold of 0.05. This stringent approach ensured the reliability of the study's findings, with only the supported hypotheses being retained.

**Pre-Strategic Plan (Pre-SP) Survey:** The second stage involved administering a Pre-SP survey to the same population of 372 students, focusing on the hypotheses supported in the initial testing phase.

**Strategic Plan Implementation and Post-Survey:** The third stage introduced the strategic plan specifically tailored for a subset of 80 participants. In the final stage, these 80 participants completed a post-survey. The data gathered were used to perform a paired-sample T-test analysis to

compare the results before and after the strategic plan's implementation (Pre-SP and Post-SP).

This methodical process thoroughly examines the research objectives and assumptions, providing a solid foundation for the study's conclusions.

## 3.3 Research Population, Sample Size, and Sampling Procedures

### 3.3.1 Research Population

A student majoring in art at the School of Journalism and Communication, Sichuan International Studies University. Entire research population for Proposed Conceptual Framework:

Art student at a SISU in Chongqing (n = 80)

Experimental group for Intervention Strategic plan

Art student at a SISU in Chongqing (n = 80)

### 3.3.2 Sample size

In regression analysis, many researchers say there should be at least ten observations per variable (Hair et al., 2014). Therefore:

The minimum sample size = 6 (number of variables in Proposed Conceptual Framework) x 10 = 60, respondents.

Consequently, the selected sample size is 80 respondents

### 3.3.3 Sampling Procedures

The researcher applied multi-stage sampling, using probability and nonprobability sampling for the quantitative method in this study. The developed questionnaire, designed using the 5 Likert Scale, was distributed online and offline to the target group.

Stage 1: Nonprobability Sampling Method as Purposive Sampling

The researchers selected two arts majors from top universities in Chongqing:

Film and Television production

Arts of Broadcasting and Hosting

Stage 2: Probability Sampling Method as Stratified Random Sampling

## 3.4 Research Instruments

### 3.4.1 Design of Questionnaire

The study's questionnaire design adheres to a systematic approach to ensure the collection of comprehensive and relevant data from Chinese university students. The process involves three distinct steps:

Step 1: Identification of Questionnaire Sources

The initial step involves a meticulous literature review, delving into existing questionnaires and survey instruments relevant to the study's objectives. Specifically, the researcher references three openly published articles that provide the foundational questionnaires: Amundsen and Martinsen (2015), Houghton and Neck (2002), and Neubert and Wu (2006). These sources are critical as they offer validated and reliable questionnaire components that can be adapted for the current research.

Step 2: Adaptation and Contextualization

The second step is customizing the identified questionnaires to suit the context of Chinese university students. This involves:

Translating and culturally adapting the questionnaires is a pivotal part of this step, ensuring they are appropriate and understandable for the target population. Modifying the questionnaires to reflect the specific nuances and characteristics of the educational environment in China is equally crucial. This step is of utmost importance to ensure that the questionnaires are not only relevant but also culturally sensitive and contextually appropriate.

Step 3: Implementing IOC (Index of Item-Objective Congruence)

The final step in the questionnaire design process is the implementation of the IOC. The IOC is a measure used to assess the congruence between the questionnaire items and the study's objectives. This step involves:

Having subject matter experts evaluate each questionnaire item for its relevance and alignment with the research objectives.

It calculates each item's IOC score to determine its suitability for inclusion in the final questionnaire.

Items that score high on the IOC are deemed congruent with the objectives and retained in the questionnaire, while those with lower scores may be revised or discarded.

### 3.4.2 Components of Questionnaire

Modified Questionnaire Design Method:

Based on the template provided, the modified questionnaire design method would involve the following steps:

**Literature Review and Questionnaire Sourcing:** Conduct a comprehensive review of relevant literature to identify existing questionnaires that can be adapted for assessing online learning satisfaction among Chinese university students.

The next step, cultural Adaptation and Customization, is of utmost importance. It involves adapting the identified questionnaires to ensure they are translated, culturally relevant, and contextually appropriate for the Chinese university student population. This process aligns the questionnaire with local educational terminology and ensures it reflects the specific characteristics of the Chinese educational context.

The item-objective Congruence Assessment is a collaborative process. A panel of experts in Chinese education and online learning will evaluate each item in the

questionnaire. Their expertise is crucial in assessing how well each item reflects the study's objectives and contributes to the overall research goals.

**Finalization and Pre-Testing:** Based on the IOC results, finalize the questionnaire and conduct a pre-test with a small sample of the target population to assess comprehension, clarity, and the overall flow of the questionnaire.

**Reliability and Validity Testing:** Perform reliability and validity tests on the pre-tested questionnaire to ensure it provides accurate and consistent measurements of the constructs of interest.

**Final Questionnaire Development:** Refine the questionnaire based on pre-test feedback and testing results to create the final version used in the main study.

By following these steps, the researcher can develop a questionnaire that is both theoretically sound and practically applicable to the specific context of Chinese university students' online learning satisfaction.

### 3.4.3 IOC Results

The Index of Item-Objective Congruence (IOC) process was utilized to validate the alignment of questionnaire items with the research objectives and term definitions in a study involving Chinese art curriculum experts. Three experts with doctoral and master's degrees independently assessed 41 questions using a scale where +1 indicated full consistency, 0 signaled suspicion, and -1 pointed to inconsistency.

Key findings include: Items I4, I5, I6, DM5, DM8, and SP5 were flagged with scores below the threshold, leading to their elimination.

After in-depth discussions, the experts, with their extensive knowledge and experience, retained all original questions despite some raised concerns. The remaining items will be subjected to further testing for validity and reliability. The IOC process, a crucial step in our research, is essential for refining the survey instrument and ensuring it accurately measures the intended constructs, ultimately safeguarding the study's integrity.

### 3.4.4 Pilot survey and Pilot test results

The researchers conducted a pilot survey of 30 students. They were randomly asked to fill out questionnaires and give feedback. After that, the researchers implemented Cronbach's Alpha internal consistency reliability test, in which values should be equal to or greater than 0.7 (Nunnally & Bernstein, 1994). So, the verification results in the table below are highly reliable for every structure.

**Table 1:** Pilot Test Result

| Variables | No. of items | Sources | Cronbach's Alpha | Strength of association |
|---|---|---|---|---|
| Self-Efficiency | 4 | Basuony et al. (2021) | 0.807 | Good |
| Content Quality | 4 | Basuony et al. (2021) | 0.912 | Excellent |
| Interactivity | 4 | Basuony et al. (2021) | 0.809 | Good |
| Deliver Method | 5 | Cheng (2020) | 0.923 | Excellent |
| Social Presence | 5 | Strong (2012) | 0.803 | Good |
| Satisfaction | 5 | Ali et al. (2016) | 0.923 | Excellent |

## 4. Results and Discussion

## 4.1 Results

### 4.1.1 Demographic Profile

The population samples selected in this study are students majoring in art from Sichuan International Studies University, a public school with an international perspective. The construction of art major has a long history, which is representative and targeted. Questionnaires were distributed to all art students at the university, and the following research conclusions were obtained.

The data was illustrated by its frequency and percent in this part, and participants who intervened were chosen from one of the author's classes. The details were as follows:

**Table 2:** Demographic Profile

| **Entire Research Population (n=80)** | | **Frequency** | **Percent** |
|---|---|---|---|
| Gender | Male | 19 | 23.8% |
| | Female | 61 | 76.2% |
| Year | First Year | 0 | 0.00% |
| | Second Year | 82 | 58.45% |
| | Third Year | 40 | 26.76% |
| | Fourth Year | 24 | 14.79% |
| **Total** | | **80** | **100%** |
| **Suggested Strategic Plan (N=30)** | | **Frequency** | **Percent** |
| Gender | Male | 8 | 26.67% |
| | Female | 22 | 73.33% |
| Year | First Year | 0 | 0.00% |
| | Second Year | 23 | 76.66% |

| Entire Research Population (n=80) | | Frequency | Percent |
|---|---|---|---|
| | Third Year | 5 | 16.67% |
| | Fourth Year | 2 | 6.67% |
| **Total** | | **30** | **100%** |

### 4.1.2 Results of multiple linear regression

Multiple linear regression is assumed. Since the independent variables, including self-efficacy, course quality, interaction, social presence, methods, and dependent variables (course satisfaction), are all continuous variables, the multiple linear regression method can be employed for analysis.

During the diagnosis stage, a series of hypotheses were proposed. The subsequent multiple linear regression yielded test results of significant importance:

H1. Variable Self-efficacy, β= -0.192, t=-2.676, p=0.008*. p efficacy is less than 0.05, which has significant significance. Self-efficacy has a significant effect on satisfaction with online learning courses.

H2. Variable Content quality, β= 0.158, t=2.061, p= 0.041*. p efficacy is less than 0.05, which has significant significance. Content quality has a significant effect on satisfaction with online learning courses.

H3. Variable Interactivity, β= 0.179, t=-2.676, p=0.019*. p efficacy is less than 0.05, which has significant significance. Interactivity has a significant effect on satisfaction with online learning courses.

H4. Variable Social presence, β= 0.171, t=2.400, p=0.018*. p efficacy is less than 0.05, which has significant significance. Social presence has a significant effect on satisfaction with online learning courses.

H5. The variable of the Delivery method, with a β=0.235, t=3.127, p=0.002*, demonstrates a significant effect on satisfaction with online learning courses. The p efficacy is less than 0.05, further reinforcing the statistical significance of the findings.

**Table 3:** The multiple linear regression of five independent variables on students' satisfaction.

| Variables | Standardized Coefficients Beta | t-value | P-value | $R^2$ |
|---|---|---|---|---|
| Self-efficacy | -0.192 | -2.676 | 0.008* | 0.303 |
| content quality | 0.158 | 2.061 | 0.041* | |
| Interactivity | 0.179 | 2.376 | 0.019* | |
| social presence | 0.171 | 2.400 | 0.018* | |
| Deliver method | 0.235 | 3.127 | 0.002* | |

**Note:** p-value <0.05*

So, all six of our hypotheses, which are H1 to H5, are valid, and then we propose new hypotheses.

H6: There is a significant mean difference in self-efficiency between the pre- and post-strategic plans.

H7: There is a significant mean difference in content quality between the pre- and post-strategic plans.

H8: There is a significant mean difference in interactivity between the pre- and post-strategic plans.

H9: There is a significant mean difference in delivery method between pre- and post-strategic plans.

H10: There is a significant mean difference in social presence between pre- and post-strategic plans.

## 4.2 Strategic Plan Stage

Based on my thesis on the influencing factors of online learning course satisfaction in art majors in Chongqing, China, with variables including self-efficacy, content quality, interactivity, delivery method, and social presence, here is a Finalized strategic plan Model with a:

By implementing this Finalized Intervention Design Implementation Model, we aim to effectively address the influencing factors of online learning course satisfaction in art majors in Chongqing, China, ultimately enhancing the overall learning experience and outcomes for students in the department.

The success of the intervention is contingent upon the thoughtful execution of each component and the continuous evaluation of its impact on online learning satisfaction in the art major. It is crucial to regularly gather feedback, assess outcomes, and be prepared to adapt the intervention as needed. This emphasis on continuous evaluation and adaptation underscores the necessity of these actions for the success of the intervention.

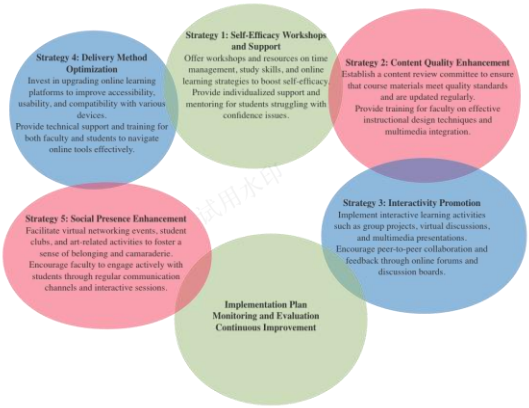


**Figure 2:** Strategic-Plan

### 4.3 Results Comparison between Pre-IDI and Post-IDI

The researchers performed a T-test analysis on the paired samples. All six variables were used to determine whether satisfaction was different between the pre- and post-strategic plan phases. The following table shows the six variables analyzed by the T-test of paired samples as follows:

**Table 4**: Paired-Sample T-Test Results

| Variables | Mean | SD | t-value | Sig. |
|---|---|---|---|---|
| **Self-Efficiency** | | | | |
| Current Situation | 15.07 | 1.91 | -2.195 | 0.028 |
| Expected Situation | 15.35 | 2.11 | | |
| **Content Quality** | | | | |
| Current Situation | 15.16 | 2.87 | -2.154 | 0.031 |
| Expected Situation | 15.51 | 2.19 | | |
| **Interactivity** | | | | |
| Current Situation | 14.66 | 2.16 | -2.385 | 0.017 |
| Expected Situation | 14.97 | 1.98 | | |
| **Delivery-Method** | | | | |
| Current Situation | 16.18 | 1.98 | -26.880 | 0.000 |
| Expected Situation | 19.86 | 2.33 | | |
| **Social Presence** | | | | |
| Current Situation | 17.81 | 2.40 | -2.609 | 0.009 |
| Expected Situation | 18.23 | 2.67 | | |
| **Satisfaction** | | | | |
| Current Situation | 15.21 | 1.94 | -2.736 | 0.006 |
| Expected Situation | 15.56 | 2.11 | | |

The table presents a paired-sample T-test analysis results for six variables related to student satisfaction, comparing the phases before and after implementing a strategic plan (pre-sp and post-sp, respectively). The T-test was used to determine if there were significant differences in satisfaction levels for each variable.

Self-Efficacy: The mean score for self-efficacy before the strategic plan was 15.07 with a standard deviation of 1.91, and after the plan, it increased to 15.35 with a standard deviation of 2.11. The T-test yielded a t-value of -2.195, with 998 degrees of freedom (df), and a significance level (Sig.) of 0.028, indicating a statistically significant difference. This robust statistical evidence instills confidence in the research findings.

Content Quality: Before the strategic plan, the mean score for content quality was 15.16 with a standard deviation of 2.87, and it increased to 15.51 with a standard deviation of 2.19 after the plan. The T-test result was a t-value of -2.154, with the same df and a significance level of 0.031, indicating a significant difference.

Interactivity: The mean score for interactivity before the plan was 14.66 with a standard deviation of 2.16, and it increased to 14.97 with a standard deviation of 1.98 after the plan. The T-test showed a t-value -2.385, with a significance level of 0.017, suggesting a significant difference.

Delivery Method: The mean score for the delivery method, a key variable, saw a significant and positive change. It increased from 16.18 with a standard deviation of 1.98 before the plan to 19.86 with a standard deviation of 2.33 after the plan. The T-test resulted in an exceptionally high t-value of -26.880, a significance level of 0.000, indicating a highly significant difference.

Social Presence: The mean score for social presence improved from 17.81 with a standard deviation of 2.40 before the plan to 18.23 with a standard deviation of 2.67 after the plan. The T-test t-value was -2.609, with a significance level of 0.009, indicating a significant difference.

Satisfaction: The overall mean score also increased from 15.21 with a standard deviation of 1.94 before the plan to 15.56 with a standard deviation of 2.11 after the plan. The T-test t-value was -2.736, and the significance level was 0.006, which is statistically significant.

In summary, the T-test analysis revealed that all six variables demonstrated not just improvements, but statistically significant improvements in satisfaction levels after the implementation of the strategic plan. This underscores the profound impact of the plan, with the delivery method showing the most substantial increase.

## 5. Conclusions, Recommendations and Limitations

### 5.1 Conclusions & Discussions

The study on the satisfaction of online courses for art majors offers a comprehensive analysis of the factors influencing student satisfaction and provides implications for educational theory and practice. Below is a structured summary of the key points from the discussion and conclusion sections:

**Self-Efficacy:** Self-efficacy is a significant predictor of satisfaction among art majors. Enhancement Strategies: Clear instructions, support resources, a growth mindset, and scaffolding assignments can build confidence and satisfaction.

**Content Quality:** High-quality, relevant, and comprehensive content is crucial for student engagement and satisfaction.Value: Art students appreciate visually appealing, culturally diverse, and intellectually stimulating content.

**Interactivity:** Interactivity is positively linked to satisfaction.Platforms: Features like discussion forums and

peer reviews provide platforms for engagement and feedback.

**Delivery Methods:** The manner of content presentation impacts learning experiences and satisfaction.Priorities: Art students benefit from multimedia integration, project-based learning, and flexible learning paths.

**Social Presence:** A sense of community and belonging, contributing to satisfaction. Strategies: Group projects, online discussions, and critique sessions enhance social presence.

### 5.2 Recommendations

Design varied activities and assignments to encourage artistic expression. Provide opportunities to experiment with different mediums and styles. Incorporate projects and critiques to foster peer learning and collaboration. Encourage constructive feedback within a supportive community. Enhance engagement with multimedia elements and interactive presentations. Integrate tools that allow dynamic interaction with course content.

Recognize diverse student backgrounds and preferences. Offer flexible learning pathways and personalized experiences. Create opportunities for social interaction and networking. Establish forums and events to share work and achievements. Provide one-on-one guidance and academic advising. Create opportunities for feedback from instructors and professionals.

Encourage analysis and reflection on student and peer work. Facilitate discussions that challenge assumptions and broaden perspectives.

Strengthening Key Factors in Art-Major Courses

**Strengthen Self-Efficacy:** Set clear, achievable goals. Provide constructive feedback. Foster a supportive learning environment. Offer resources and support services. Encourage self-reflection and self-regulation. Celebrate student achievements. Model and encourage perseverance.

**Strengthen Content Quality:** Ensure a comprehensive and structured curriculum. Provide authentic learning experiences. Implement effective feedback and assessment.

Integrate multimedia and technology: Foster collaboration and peer learning. Offer flexible and personalized learning options. Support faculty development.

**Strengthen Interactivity:** Foster collaborative learning and peer interaction. Provide synchronous and asynchronous communication. Utilize interactive tools and platforms.

Offer real-time feedback, encourage reflection and dialogue, design engaging multimedia content, and foster a sense of community and peer review.

**Strengthen Delivery Methods:** Offer diverse delivery methods, diversify instructional strategies, provide clear instructions and expectations, offer flexible learning opportunities, incorporate interactive elements, foster student engagement, provide timely feedback, and promote reflective practice.

**Strengthen Social Presence:** Foster a collaborative learning environment, facilitate online discussions, promote student engagement in the community, provide networking opportunities, offer virtual studio spaces, and cultivate a sense of community.

By addressing these areas, educators can create online courses that are engaging, effective, and tailored to the needs of art majors, leading to increased satisfaction and success in their academic pursuits.

### 5.3 Limitations for Future Research

Due to institutional, cultural, and demographic differences, the study's findings may not apply to contexts outside the specific setting.

Data collected via surveys or interviews may be subject to bias, as participants might provide socially desirable answers rather than accurate ones. Relying solely on surveys or interviews could limit the scope of the research; a mixed-methods approach could provide a more comprehensive understanding.

The study focuses on immediate outcomes, potentially missing long-term effects, or the sustainability of satisfaction improvements.

Measurement Validity It is crucial to ensure that the measurement tools accurately assess the intended constructs and are consistent and stable.

The study does not explicitly address how external factors like technology disruptions or socio-economic conditions might impact satisfaction.

Despite these limitations, the research offers valuable insights and practical implications for enhancing the quality of online education in the arts.

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