

# Investigating College Students Online Learning Experiences at a Large Multi-Campus Institution

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**Abstract:** The design of online courses strongly influences students' online learning experiences. As the number of students in online courses increased dramatically in the past decade, how students' experiences of online learning change over the years remain unknown. This study used a mixed-method to investigate college students' perspectives of online learning experiences. By examining 20958 online Community of Inquiry questionnaires and identifying the major factors variables, the results suggest online instructors should design the class with activates for more social interaction to enable students to share their affections to increase a sense of learning community.

## Introduction

In the past few decades, there has been a large number of online courses offered by universities and community colleges. Enrollment in online classes will keep growing in the upcoming years (Allen & Seaman, 2013). Despite the number of students enrolled in the online courses, there have been concerns about student persistence, attrition, dropout, and outcomes. Few large-scale mixed-method studies have been conducted to investigate factors that influence students' online course selection. In this study, we adopt the Communities of Inquiry (COI) framework developed by Garrison, Anderson and Archer (2000) as the conceptual framework to examine reasons behind college students' preference for online and face-to-face instruction medium. This framework has been proved to be useful in studying online learning experiences. This study aims to understand the reasons for students not choose online classes at a large multi-campus institution and predict what factors affect students the most in choosing online courses in the future.

## Methods, data sources, and analysis participants and data sources

Participants were 20958 college students from 64 campuses of a large multi-campus Northeastern state university. From Fall 2010 to Spring 2016, participants completed online surveys once a semester comprised of demographic information items, questions on the teacher, social, and cognitive presence (as part of COI framework), and questions on reasons for choosing online learning format and reasons for not considering online learning format in the future. The online Community of Inquiry questionnaire used a 5-point Likert scale and 6 stands for I choose not to answer this question. The participants were 74% female, 26% male, 31%. Here we analyzed the open-ended responses to the first question. We employed constant comparative analysis to analyze the data through the coding procedures of "open", "axial", and "selective" coding throughout the study to help establish relationships into the theoretical framework (Strauss & Corbin, 1998).

## Results

### RQ1: How do college students describe the reasons for not choosing the online learning format?

We coded the open-ended responses for the question, "If you would not consider taking online courses in future, why?". Some of the main themes from this analysis included: "preference for face-to-face medium, difficulty of online classes, disliking the online medium, unclear instructions or lack of organization in the online course." For the complete coding scheme, please see Figure 1. Among the responses, "unclear or lack of instructions" and "timeliness of feedback" pointed to the lack of teacher presence in the course, where the course was perceived not to have been designed well and students were frustrated with delays in feedback, grades, and email responses from their professors. Notably, the need for "time management and discipline" points to a need for self-regulated learning in online environments. This is also emphasized by the category "feeling of teaching oneself" and "difficulty to stay motivated/committed," where students are frustrated that they need to study, plan, and monitor their learning, motivation, and commitment by themselves without external scaffolds and prompts typically provided by teachers in face-to-face classes.

## RQ2: What are the major factors in the COI framework that will influence students' future course selection?

Based on the answers of “Based On Your Experience Would You Consider Taking Other Online Courses In The Future,” researchers found that for students who chose conflicting work responsibility, conflicting family responsibility and distance from campus show high interest in selecting online classes again (Figure 2). In order to predict which variables influence students' intention of choosing online courses in the following semester. The researchers used “Based On Your Experience Would You Consider Taking Other Online Courses in The Future” as a dependent variable, the researchers used logistic regression to build a prediction model, and recursive feature elimination(REF) to select desired features. The results show that the variable of “Affective Expression: students Found Online Or Web Based Communication An Excellent Medium For Social Interaction” has the highest weight in the prediction of whether the students will choose the future course or not. The model contains an accuracy of .72.

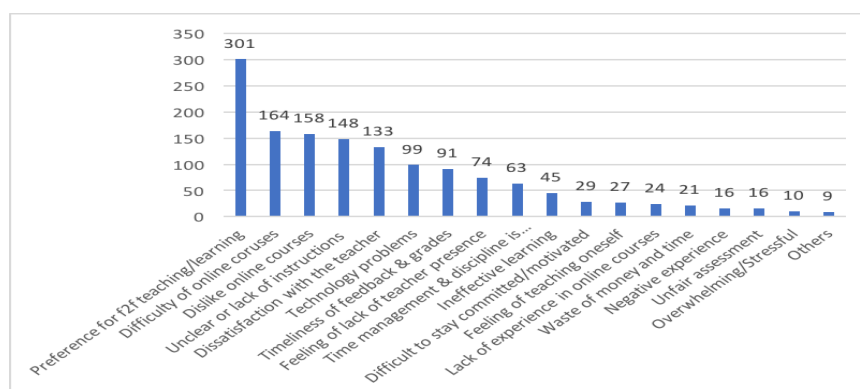


Figure 1. Categories of responses to the question “If you would not consider taking online in the future, what is the reason?”

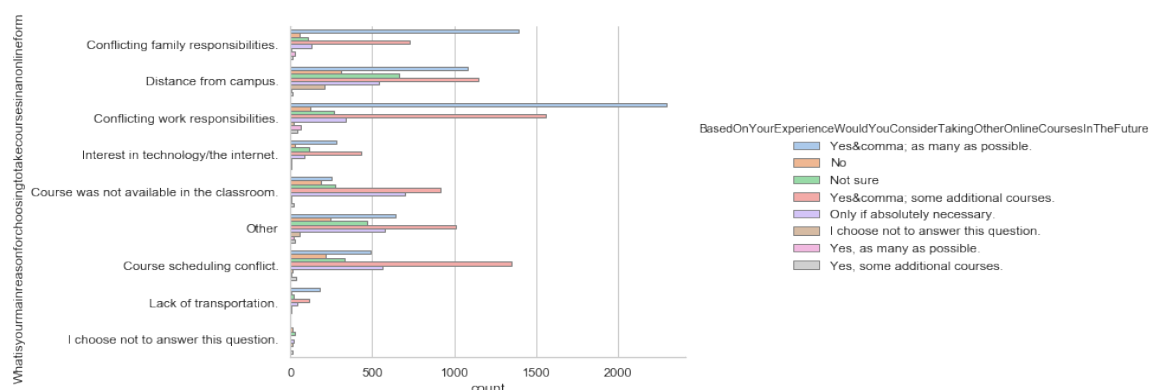


Figure 2. Students' willingness to choose the next online class based on the reasons they chose the course.

## Discussion

This study has sought to extend our understanding of the various reasons college students not choose online learning format, the benefits they assign to online learning, and challenges or reasons for not choosing online learning format. This study investigates the COI model by providing evidence from student perspectives on teacher, cognitive, and social presence. Findings also provide insights into students' perceptions, that could help in identifying risk factors for student dropout and low learning outcomes. The prediction model reveals the importance of designing the online classroom as a community with good social interactions.

## References

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