

Exploring student experiences and virtual learning in apparel and textiles curriculum during the COVID-19 pandemic

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## **Background, Purpose, Significance**

The coronavirus 2019 (COVID-19) pandemic created significant challenges in higher education (Crawford et al., 2020). Many universities had to abruptly move to online or hybrid learnings and instructors struggled to create interactive learning environments (Garcia & Weiss, 2020). Especially, apparel and textiles classes are challenging since many learning contents required hands-on activities to engage with students (e.g., patternmaking, fashion illustrations, product development). Remote instruction is only shown to work well for students with intentional, personalized, and sufficient resources (Garcia & Weiss, 2020), and it is not well known how different learning resources influence students' virtual learning. The purpose of this study was to explore apparel and textiles students' experiences and virtual learning during the Covid-19 pandemic. Research questions included a) how did COVID-19 pandemic influence students' academic learning?, b) what difficulties or issues were perceived by the students that affected their learning?, c) what learning tools were helpful and not helpful for enhancing their learning? and d) what are students' perceptions in regards to employment after graduation and career in the industry? By knowing students' learning experiences and mental states while taking online and hybrid classes, the results would help instructors better integrate effective instructional strategies that engage and motivate students to enhance virtual learning.

## **Method and Theoretical Underpinnings**

A total of 114 students enrolled in five different apparel and textile classes at a large university in the United States participated in this study. Data were collected through an online survey with both open and closed-ended questions with a 7-Point Likert type scale. The questions asked about the students' perceptions of the pandemic and how it influenced their academic learning, most difficult parts for them to engage in learning during the pandemic, most helpful learning tools, and their thoughts on how pandemic would influence their employment perspectives after graduation. Descriptive statistics was used to analyze demographic and closed-ended questions. Categories and themes were identified for the qualitative data using the constant comparison analysis (Corbin & Strauss, 2008). The study adopted educational theory (Dick & Carey, 2014) which informs instructional design models to provide guiding framework for the development of effective and reliable instruction especially by focusing on learner characteristics and the learning environment.

## **Results and Discussions**

About 89% of the students identified as female with an average age of 20 years old, and a majority of the students were White/European American (80%), followed by Asian (8%), Hispanic (6%), African American (2%) and other (4%). About 39% of the students were sophomore, followed by junior (34%), senior (19%), and freshman (8%). About 57% of the students majored in merchandising, followed by double-majoring in apparel design and

merchandising (18%), apparel design (15%), and other (10%). A majority of the students (78%) took online classes only and about 21% of the students took online and in-person classes during Fall 2020 semester. The students perceive lack of motivation ( $M=1.75$ ,  $SD=.86$ ) and worries about getting a job ( $M=1.72$ ,  $SD=.88$ ) to be two factors that most negatively affect their ability to engage in learning during the pandemic, followed by insufficient interaction with peers ( $M=2.16$ ,  $SD=1.03$ ), insufficient interaction with instructors ( $M=2.24$ ,  $SD=1.04$ ), concerns about COVID-19 ( $M=2.68$ ,  $SD=1.04$ ), and financial issues ( $M=2.71$ ,  $SD=.98$ ). The results also showed that technology related issues were not dominant factors that negatively influenced the students' learning. The students perceived synchronous lectures to be more effective ( $M=5.15$ ,  $SD=1.52$ ) compared to asynchronous lectures ( $M=4.81$ ,  $SD=1.60$ ) and the most effective tool was having Zoom invited guest speakers ( $M=5.7$ ,  $SD=1.16$ ). Analysis of the qualitative data revealed that students' opinions related to impact of the pandemic on their learnings were tied to online learning experiences. Many stated that online learning was "*not what they signed up for*" [P#]. Lack of motivation in online learning environment was a major issue for students. "*Feeling lazy and undriven*" and "*found myself with no motivation and work ethic*" were expressions used. Feelings of disconnectedness was another major theme. Students felt disconnected from peers and instructors and found it difficult to form friendships or reach out for help. Feelings of loneliness and isolation was expressed, especially by new students. Students also felt disconnected from learning as classes felt "*optional*" and "*not professional*" as they were at home, and it was easy to miss deadlines. Studio-based hands-on classes were of special concern as students thought that they cannot be effectively done from home. Online learning environment was perceived as passive by many students, and engaging, active participation, and information retention were challenging. Many students stated that they developed mental health problems and that it affected their ability to learn. Students had also positive perspectives related to online learning during the pandemic. For example, they learned to manage their time better, became more organized, and developed better study habits in response to the new learning environment. Adapting, changing learning styles, and "*stepping out of learning comfort zone*" rather than waiting for "*things to get back to normal*" were behaviors mentioned by the students. Many thought that as they acquired more skills (e.g., communication, collaboration, technology) and learned to adapt, they would be more successful in securing employment after graduation. However, most students did not share this positive attitude as they believed it would be difficult to find internships and employment, and that the job market would be more competitive. Students were also concerned that they were "*less prepared*" for jobs and would be perceived as "*less capable*" by employers as they were taught virtually during the pandemic. Based on the results of the study and the educational theory (Dick & Carey, 2014), a guiding instructional framework was proposed. The instructional strategies emphasize providing interactive asynchronous meetings between instructors and students as well as among students to create a sense of social belonging. Various communication channels with students are also proposed for the framework. Continuous assurance of connected learning and engagement with industry guest speakers and sharing their own struggles while working remotely would motivate students and elevate anxiety on future employment.

**References**

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