STUDENT ENGAGEMENT AND SATISFACTION WITH ONLINE LABS

Hospitality and tourism is a ‘people business.’ So what happened when the need for social isolation as a result of COVID-19 forced hospitality educators to rethink their pedagogical strategies and move previously face-to-face courses online? In one of the first studies of its kind, Marissa Orlowsk, Cynthia Mejia, Robin Back and Jason Fridrich from UCF Rosen College of Hospitality Management researched student engagement and satisfaction in online culinary and beverage labs.

The COVID-19 pandemic forced educators around the world to rethink their teaching strategies as the need for social distancing meant that courses had to move online. Hospitality and tourism education was no exception, and important lessons have been learned, both positive and negative, to inform how courses in the discipline are taught, now and in the future.

New research from UCF Rosen College of Hospitality Management focuses on the specific experience of culinary and beverage laboratories (lab). Going online posed a particular challenge for such courses which, before the pandemic, were mostly based on experiential, ‘hands-on’, classroom-based learning in food preparation and wine and spirits tastings.

Published in the Journal of Hospitality & Tourism Education, this important new study focuses on the role that ‘social presence’ plays in predicting students’ levels of engagement and satisfaction with online culinary and beverage labs.

The research is grounded in the Community of Inquiry (CoI) and social constructivist approach to learning developed by early 20th-century philosophers and psychologists. According to this theoretical framework, learning is socially situated and involves the meaningful interaction of a community of learners.

More recently, Canadian educational psychologist Randy Garrison has developed the CoI model, arguing that three ‘presences’ come together to create the educational experience. These are: social presence (students’ ability to establish relationships); cognitive presence (students’ ability to acquire knowledge through reflection and purposeful discourse); and teaching presence (the facilitation of social and cognitive presence to create the right environment for students to achieve their learning expectations and capabilities).

Based on this theoretical background, the team had two research questions: is there a relationship between a student’s social presence and their satisfaction with the online culinary or beverage lab, and does engagement serve as the underlying mechanism linking students’ social presence and their satisfaction with it?

**STUDY SAMPLE AND METHOD**

Participants in the study were recruited from three undergraduate culinary and beverage lab courses conducted in summer 2020 by a university in the south-eastern U.S. The courses had multiple sections taught by different instructors, and all had changed from face-to-face to online instruction as a result of the pandemic.

The six-week culinary management course consisted of a daily virtual lecture and virtual lab component, with related PowerPoint lectures with voice-overs, pre-recorded cooking demonstrations, videos, online quizzes, and discussions led by a Chef-Instructor.

Two beverage courses of the same length (a wine course and a spirits course) included pre-recorded lectures and virtual tastings delivered via PowerPoint lectures with voice-overs along with related readings, videos, online games, quizzes, and discussions. There were also optional online ‘meet and greet’ sessions using Zoom to facilitate student engagement with each other and with their instructor.

**SOCIAL PRESENCE WAS INDIRECTLY RELATED TO COURSE SATISFACTION THROUGH EMOTIONAL AND COGNITIVE ENGAGEMENT.**

A total of 211 undergraduates enrolled in the courses. All were sent an email inviting them to take part in the mixed-methods follow-up research, and of the responses received, 156 were analysed. The majority of respondents were females aged between 22 and 25, consistent with the population under investigation.

The research was conducted by means of a three-section survey: quantitative questions to assess social presence, course engagement and course satisfaction; qualitative questions to explore student interaction; and questions to probe demography. Exploratory factor analysis (EFA) was used to analyse quantitative data and Maxqda software was used to analyse the qualitative data.

**RESULTS**

The use of both quantitative and qualitative research methods helped to reveal the complexity of the relationship between students’ social presence, emotional and cognitive engagement, and their satisfaction with their online courses.

Quantitative analysis revealed that social presence had a positive effect on both emotional and cognitive engagement. Emotional and cognitive engagement similarly was positively related to course satisfaction. Social presence was also indirectly related to course satisfaction through emotional and cognitive engagement.

Analysis of the results of the qualitative questions showed that overall, students enjoyed their online courses’ design and content, and the way in which their instructors presented the lessons. One student commented: ‘The course resources were easily accessible and the professor made the course very easy to navigate.’ However, unsurprisingly, students also felt that they had had little student-to-student interaction and few opportunities for social engagement. As one student said: ‘It was more difficult to communicate or interact online than in person.’ This was backed up by another who said: ‘Since we only had one course discussion, I wasn’t able to get to know other students.’

For the most part, the students in the culinary lab course and beverage lab courses reported similar experiences, but there were...
The quantitative analysis revealed that social practices in teaching online labs. In particular, it reveals the importance of emotional and time. This study has important theoretical to fully face-to-face instruction for some to find a ‘new normal’ which allows us to live alongside COVID-19, it is unlikely that many institutions of higher education will return satisfaction with online food and beverage labs, but it was indirectly related through emotional engagement and, to a lesser extent, cognitive engagement. In addition, the connections and interactions that primarily manifested social presence were not peer-to-peer, but between students and their instructors. The research shows that, as courses progressed, Zoom meetings and pre-recorded lectures enhanced the role of instructors who became proxies for social presence. To quote the study: ‘Student interactions were directly connected to instructor quality / frequency interactions, revealing the symbiotic relationship in well-designed courses, demonstrated in prior CoI framework research.’

GOING FORWARD
COVID-19 has forced a paradigm shift in pedagogy, as in so many other areas of people’s lives, including, and not limited to, their working, learning, training, and development. The crisis has accelerated the evolution of different pedagogical strategies and the move to online learning has led to a transformation in our understanding of what it means to enroll in an educational course. The Rosen College researchers’ study is therefore important and timely. As its authors conclude: ‘The results offer a path forward regarding course design opportunities to enhance social presence and engagement as a means of stimulating online course satisfaction in formerly interactive settings.’

In addition, the qualitative analysis revealed that, while students thought hands-on learning would have been better, they had constructive ideas about how online learning could be improved. Among those suggested by culinary students were the inclusion of Zoom / synchronous virtual meetings as students cooked at home, and the use of discussion platforms for students to discuss family recipes. Suggestions from beverage students included students selecting a wine and delivering a live virtual presentation to the class, and instructors providing online discussions after virtual tastings.

The research also showed that students enjoyed the online labs’ design and delivery, and appreciated the flexibility of online learning. Not only did their re-fashioned courses allow for asynchronous learning, they also enabled students to watch the online content as many times as they needed to consolidate their understanding.

However, by not undertaking experiential learning in face-to-face lab settings, students missed tactile interaction with the food or beverages, as well as the kind of peer support that helps to address potential anxieties when faced with something new.

Orlowski, Mejia, Back, and Fridrich suggest that instructors could make use of the CoI framework to evaluate their own online course delivery, for example by means of online student surveys. The researchers comment: ‘As with the current study, instructors may wish to focus solely on social presence, however, for a more detailed evaluation, teaching presence and/or cognitive presence could also be included.’ The researchers acknowledged that their sample was relatively small and data were collected in a summer semester when fewer students were enrolled. Future research could attempt to replicate their findings with a larger sample.

RESEARCH OBJECTIVES
Dr. Cynthia Mejia and the team researched student satisfaction and engagement with online courses during COVID-19.


CONCLUSIONS
While the data generally revealed that students were satisfied with their courses, many agreed that both the culinary and beverage courses would have been better in a hands-on setting. In addition, they would have liked more opportunities to engage with their course and with each other, and/or with their instructor.

IMPLICATIONS
Although the world is opening up and trying to find a ‘new normal’ which allows us to live alongside COVID-19, it is unlikely that many institutions of higher education will return.

ZOOM MEETINGS AND PRE-RECORDED LECTURES ENHANCED THE ROLE OF INSTRUCTORS WHO BECAME PROXIES FOR SOCIAL PRESENCE.

to fully face-to-face instruction for some time. This study has important theoretical and practical implications for long-term best practices in teaching online labs. In particular, it reveals the importance of emotional and cognitive engagement as the mechanisms by which social presence is linked to student satisfaction.

The quantitative analysis revealed that social presence was not directly related to student differences regarding instructor interaction, with beverage students reporting higher levels of satisfaction than culinary students. While the data generally revealed that students were satisfied with their courses, many agreed that both the culinary and beverage courses would have been better in a hands-on setting. In addition, they would have liked more opportunities to engage with their course and with each other, and/or with their instructor.

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