Objective
➢ To determine the level of collaboration, social presence, and satisfaction with online discussion assignments among students enrolled in a 16-week asynchronous online undergraduate lifecycle nutrition course.

Background
➢ With advances in technology, student-driven learning demands, coupled with the Covid-19 pandemic, higher-education institutions are offering more asynchronous online courses.
➢ While highly effective, engagement is challenging.
➢ Graded student discussions are often incorporated to facilitate student engagement.

Evaluation Methods
➢ During the first 3-weeks, all 74 students completed 1 video-only and 1 written-only discussion assignment before their equal, random distribution to a written-only (WO), video-only (VO), or written-video only (WVO) discussion group for the 12-week intervention on nutrition-related topics with an initial and response post requirement.
➢ Consenting students completed the collaborative Learning (CL), Social Presence (SP), and Satisfaction (SATIS) questionnaires pre- and post-intervention.
➢ Pre: Week 4 (n=25; 8 WO, 8 VO, 9 WVO)
➢ Post: Weeks 13-15 (n=26; 6 WO, 7 VO, 13 WVO)
➢ Comparison of means, descriptive statistics, and Pearson \( \chi^2 \) analysis was conducted (All study procedures were approved by the Institutional Review Board).

Results
Collaborative Learning Scores
- Pre CL Mean 34.286 ± 0.001 SD;
- Post CL Mean 36.4 ± 0.03 SD

Social Presence Scores
- Pre SP Mean 58.876 ± 1.29 SD;
- Post SP Mean 50.285 ± 0.032 SD

Student Satisfaction Scores
- Pre SATIS Mean 41.995 ± 0.018 SD;
- Post SATIS Mean 40.03 ± 0.06 SD

Conclusions
➢ While video assignments are a viable option for student engagement, this data suggests a decreased trend in SATIS with VO compared to WO or WVO
➢ More larger studies are needed in order to further assess these assignment options
Objective: To determine the level of collaboration, social presence, and satisfaction with online discussion assignments.

Use of Theory or Research: With advances in technology, student driven-learning demands, coupled with the Covid-19 pandemic, more higher-education institutions are offering asynchronous online courses. While highly effective, engagement is challenging. Graded student discussions are often incorporated to facilitate student engagement.

Target Audience Students: (n=74; 84% Health Science majors) enrolled in a 16-week asynchronous online undergraduate life cycle nutrition course (Spring 2021).

Course/Curriculum Description: During the first 3-weeks, all students completed 1 video-only and 1 written-only discussion assignment before being equally randomized into a video-only (VO), written-only (WO), or written-video only (WVO) discussion group. Each group completed 6 discussions over 9-weeks on nutrition-related topics requiring an initial and response post. WVO students completed 3 written and 3 verbal discussion assignments in alternating format.

Evaluation Methods: Consenting students (n=25 pre-; 26-post study) voluntarily completed the Collaborative Learning (CL), Social Presence (SP), and Satisfaction (SATIS) questionnaires during week 4 (n=8 WO, 8 VO, 9 WVO) and weeks 13-15 (n=6 WO, 7 VO, 13 WVO). Comparison of means, descriptive statistics, and Pearson χ² analysis were conducted (IRB # 2012010996).

Results: No significant differences were observed between or within groups for CL, SP, and SATIS scores. However, the CL score increased the most in the WO compared to the VO group (12.8% vs-3.3%) while SATIS scores increased 2.5% in the WVO and 9.7% in the WO groups but decreased 12.4% in the VO group. SP declined in all groups with the WVO group decreasing the most at 28.6%.

Conclusion(s): Video assignments are a viable option for student engagement, even though this pilot study was unable to match student's pre- and post-scores. This data suggests a decreased trend in satisfaction with video-only compared to written-only or a combination of the written-video in discussion forums, but larger studies are needed to further address this question.
References


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