

Video, Written, or Combination? A Pilot Study Discovering Which Type of Engagement Undergraduate Students Preferred for Online Discussions

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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 χ^2 analysis was conducted (All study procedures were approved by the Institutional Review Board).

No significant differences were observed between or within groups for CL, SP, or SATIS scores

CL scores increased the most in the WO compared to the VO group (12.8%-vs-3.3%)

SP declined in all groups with the WVO group decreasing the most at 28.6%

SATIS scores increased the most in the WO compared to the WVO group (9.7%-vs-2.5%)

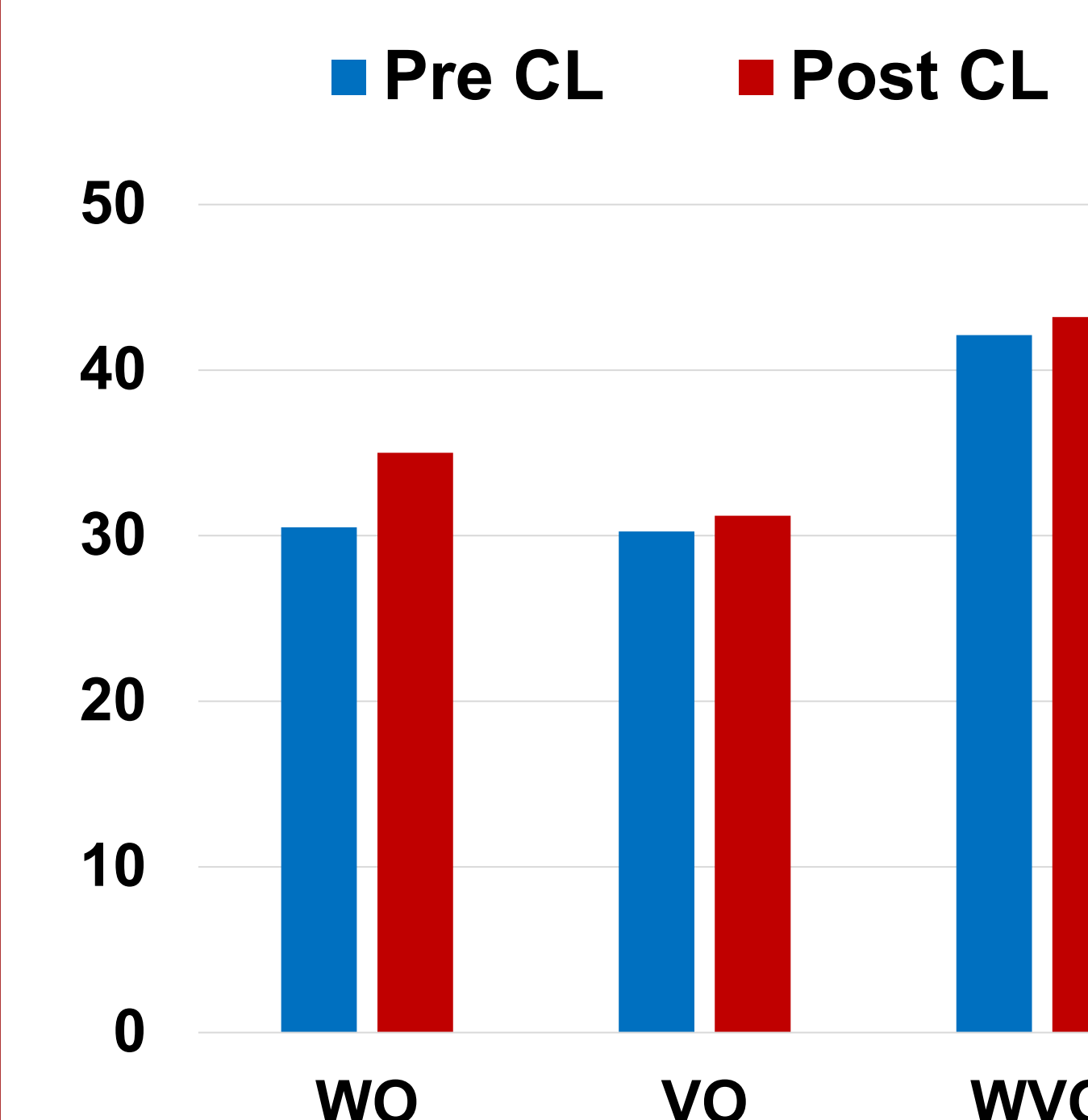
SATIS scores decreased 12.4% in the VO group



Take a picture to download the full poster or visit <https://go.iu.edu/4qGN>

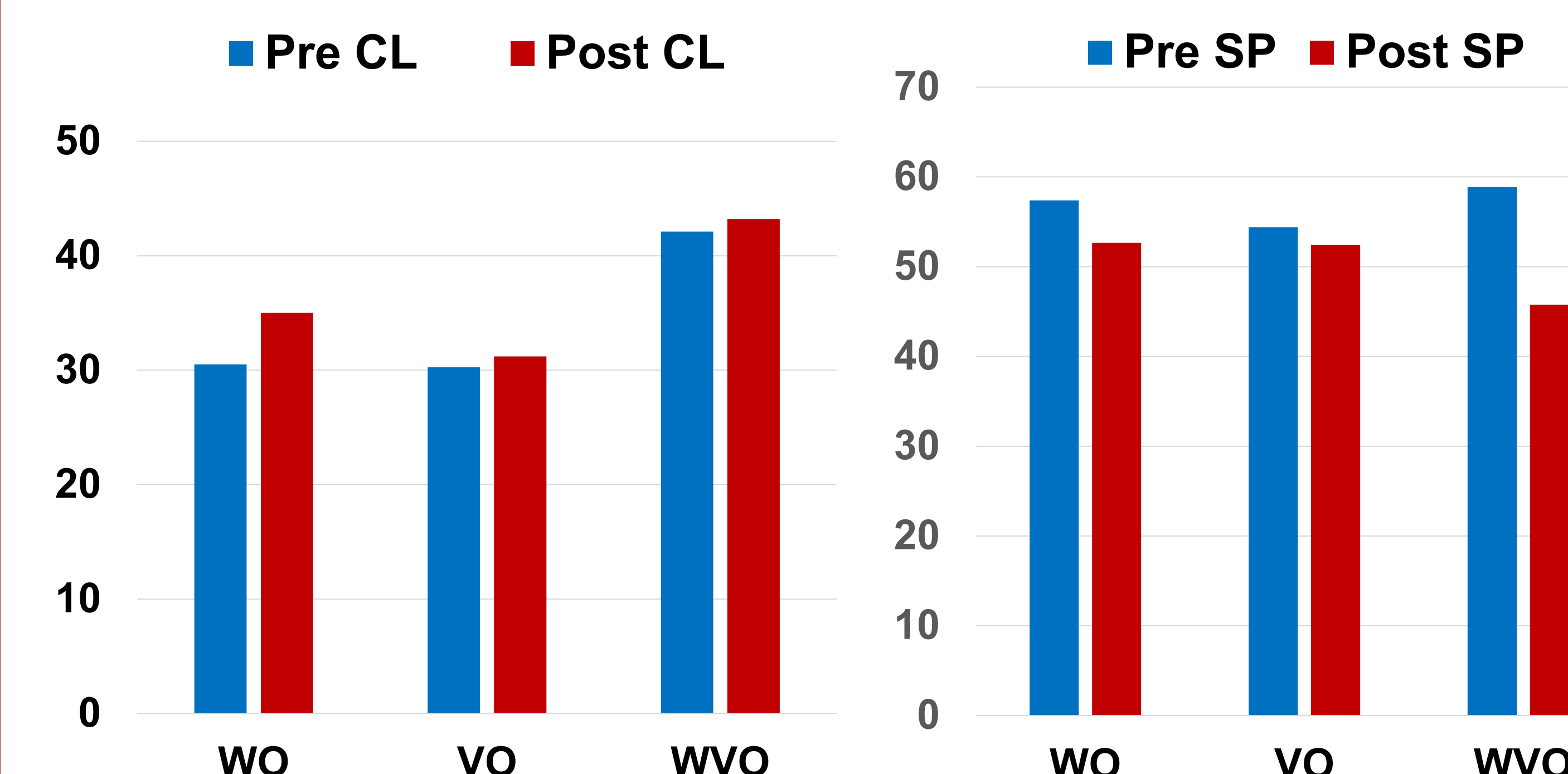
Results

Collaborative Learning Scores



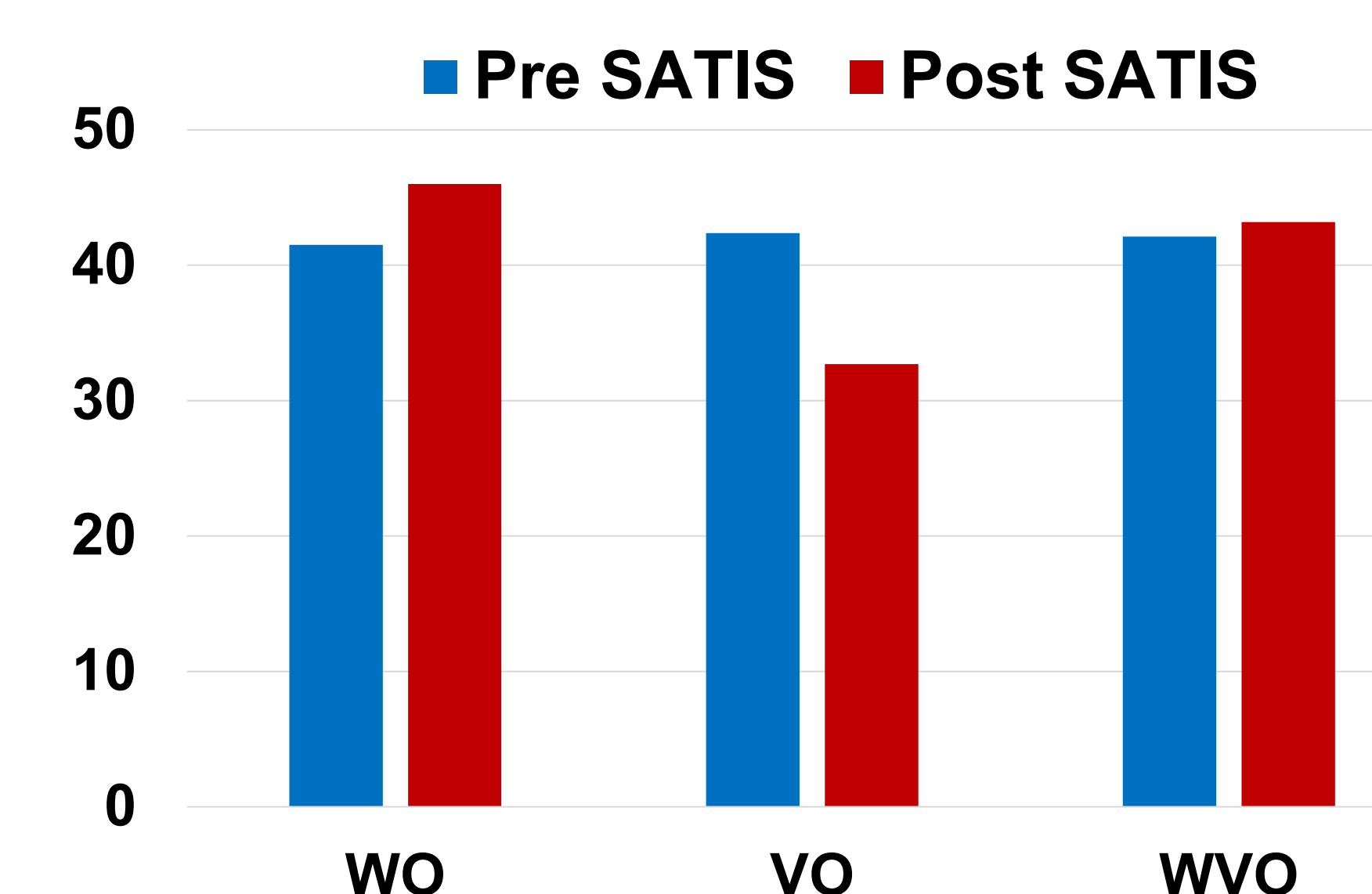
Pre CL Mean 34.286 ± 0.001 SD;
Post CL Mean 36.4 ± 0.03 SD

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

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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 χ^2 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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