Integrating interactive video lectures into a hybrid research methods course

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<u>Aim:</u> The current study sought to students' perspectives on the inclusion of interactive video lectures (IVLs) into two hybrid research methods courses. It also includes how video results guided class sessions, particularly through the use of the muddiest point question in each ILV.

Method:

Implementation of interactive video lectures (IVLs) into two Family and Consumer Science 200-level hybrid research methods courses (Spring and Fall 2019, each met 11-11:50 Wednesday Face-to-Face).

IVLs contained questions and reflection opportunities embedded into the videos similar to face-to-face class sessions using interactive response programs (such as clickers; Tophat). Each video contained an open-ended question at the end soliciting what was the muddiest point (most confusing point) from the video.

The responses in the ILVs were due 11:59 p.m. Tuesday night. On Wednesday morning the professor and an undergraduate teaching assistant reviewed the responses, which helped guide what aspects of the content were clarified and focused upon during the in-class session.

Surveys were given in final two weeks of each course soliciting feedback on the implementation of the interactive video lectures, the in-class sessions, and how they supported student learning.

Results:

Demographics (N= 86)

- Major: 59.3% Retail and Consumer Sciences; 30.2% Family Studies and Human Development; 10.5% Other
- Gender: 83.7% female; 16.3% male
- Average age: 20.19 years (*SD*= 1.06)
- Class standing: 2.3% freshmen; 44.2% sophomore; 51.2% junior; 2.3% senior
- Prior experience with a hybrid class: 65.9%
- Previous experience with video lectures in a class: 60.7%
- Previous experience with interactive video lectures: 51%

Ranking of questions that were rated as most beneficial to students' learning:

- 1. Multiple choice questions
- 2. Check all that apply questions
- 3. The fill in the blank questions
- 4. The free responses questions
- 5. The reflective pauses

Table 1. Student perspectives on use of interactive video lectures

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
The embedded videos were beneficial for my learning	3.6	4.8	3.6	9.6	13.3	31.3	33.7
The embedded questions helped increase my understanding of the content	4.8	3.6	3.6	3.6	22.9	34.9	26.5
The embedded questions helped solidify what I needed to study	3.6	7.2	7.2	7.2	26.5	27.7	20.5
The embedded questions helped keep my attention during videos	6.0	4.8	6.0	9.6	19.3	33.7	20.5
The embedded questions helped keep me engaged in the material	3.7	2.4	8.5	9.8	23.2	29.3	23.2
I would continue the use of embedding questions in lecture videos	4.8	7.2	7.2	12.0	16.9	26.5	25.3
I paid more attention to the video because of the questions embedded in the videos	3.6	7.2	7.2	14.5	14.5	28.9	24.1
The embedded questions that asked me to think about my knowledge of the topic	4.8	3.6	3.6	16.9	22.9	26.5	21.7
helped me make connections with the course content							
The embedded questions that asked me to predict an answer before being shown the information were beneficial to my learning	6.0	10.8	7.2	18.1	22.9	20.5	14.5

Table 2. Student perspectives on specific types of questions

Now we would like to get your feedback on certain	Extremely	Unhelpful	Neither helpful nor	Helpful	Extremely
features of PlayPosit. Please note how helpful were	unhelpful		unhelpful		helpful
the					
Multiple choice	0.0	0.0	8.4	59.0	32.5
Check all that apply	0.0	9.6	14.5	55.4	20.5
Fill in the blank	3.6	8.4	18.1	50.6	19.3
Free response	1.2	13.3	19.3	55.4	10.8
Reflective pauses	7.2	13.3	26.5	44.6	8.4