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# Technical Quality and Engagement in a Hybrid Communication Course

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# Technical Quality and Engagement in a Hybrid Communication Course

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## Introduction

The goal of this project is to determine the most effective learning strategies and the impact of technical quality for Franklin University students in a hybrid or blended format group communication course.

- The hybrid course format balances asynchronous independent study work with weekly synchronous sessions.

- The weekly sessions combine face-to-face learners with online learners in an instructor led technologically-mediated synchronous class.

- The richness of the planned learning activities and the quality of the technology impact course quality and student engagement.

### Elements of Effective Instruction in Blended Courses

- Courses are redesigned for the hybrid or blended instructional context (Dziuban, Hartman, & Moskal, 2004)

- Online and face-to-face learning activities are effectively integrated (Akyol, Garrison, & Ozden, 2009)

- Pedagogical decisions reflect a focus on **student engagement** (Glazer, 2012; Karal, Cebi, & Turgut, 2011; Collopy & Arnold, 2009; Dziuban, Hartman, & Moskal, 2004).

### Learning Activities in the Communication Hybrid Course
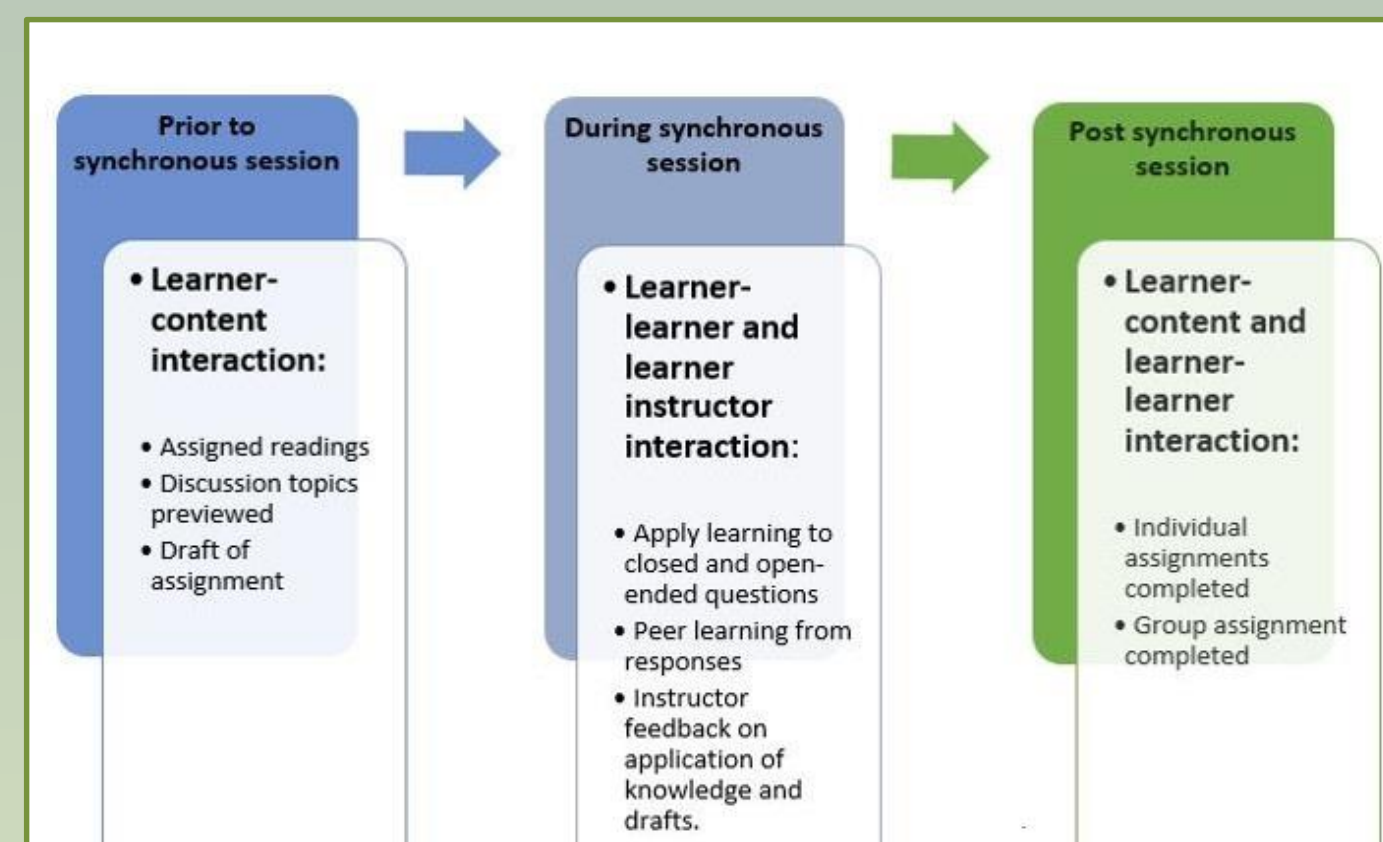


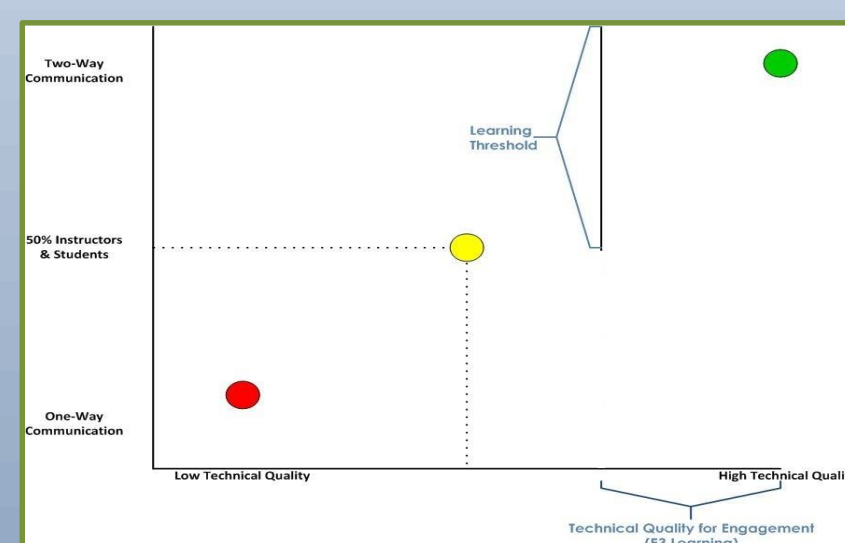### Hindrances to Effective Instruction in Hybrid Courses

- Technology issues (Millichap & Vogt, 2012)

- Instructor resistance to instructional format (Glazer, 2012)

- Student resistance to responsibility for learning (Karal et al, 2011)

## Models of the Hybrid Instructional Context

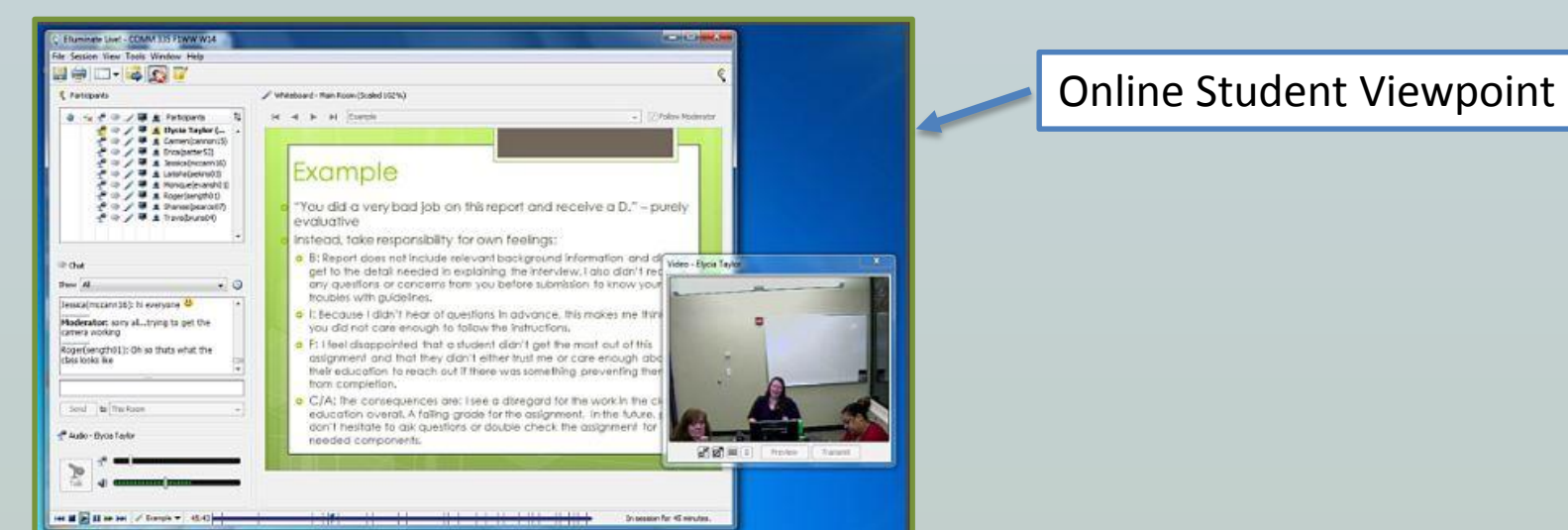### Caladine's Model of Video Conferencing
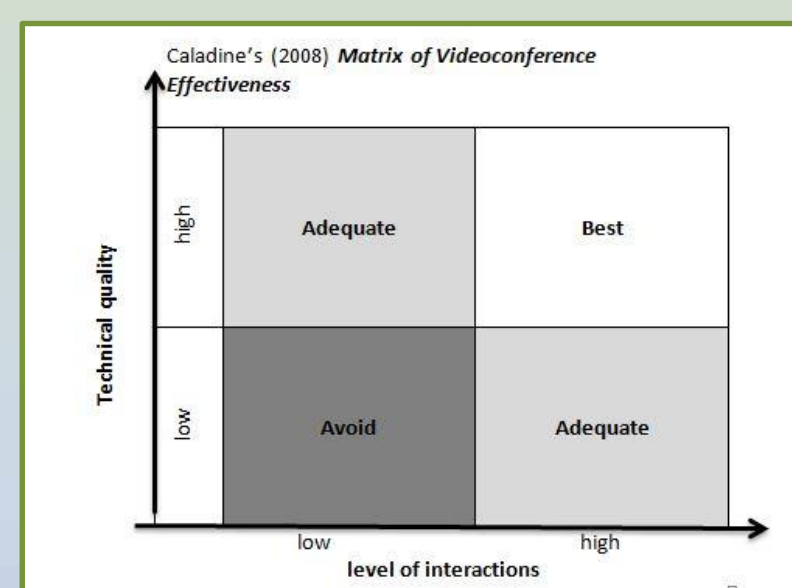


### The Bell-Jones Learning Threshold for E³ Learning



## Methods

### Research Context



Online Student Viewpoint

What is needed to achieve quality learning in a hybrid instructional context?
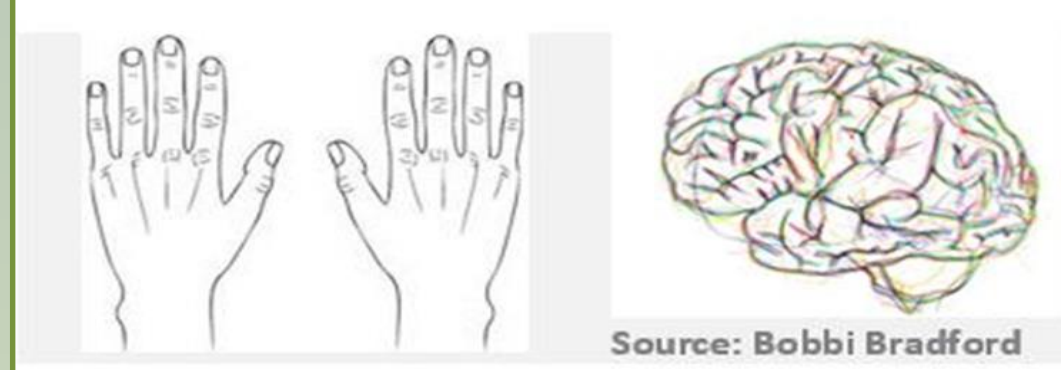
What channels do students choose to use? Are they drawn to richer media like video as well as audio?

Face-to-face Student Viewpoint



### Student Engagement

Behavioral   Cognitive

Source: Bobbi Bradford

*Behavioral engagement* is "any overt action a learner takes during an instructional episode" (Clark & Mayer, 2011, p. 16-17)

*Psychological engagement* is defined as "cognitive processing of content in ways that lead to acquisition of new knowledge and skills" (Clark & Mayer, 2011, p. 17).

### Research Questions

**RQ1: Does video quality affect the level of learner engagement in a hybrid classroom?**

**RQ2: Does audio quality affect the level of learner engagement in a hybrid classroom?**

**RQ 3: What channels do students use to engage with the instructor and other students in a real-time web-based class session?**

### Student Survey



## Methods Continued

### Observational Coding of Technical Quality



## Results

### Technology Channels Used by Students
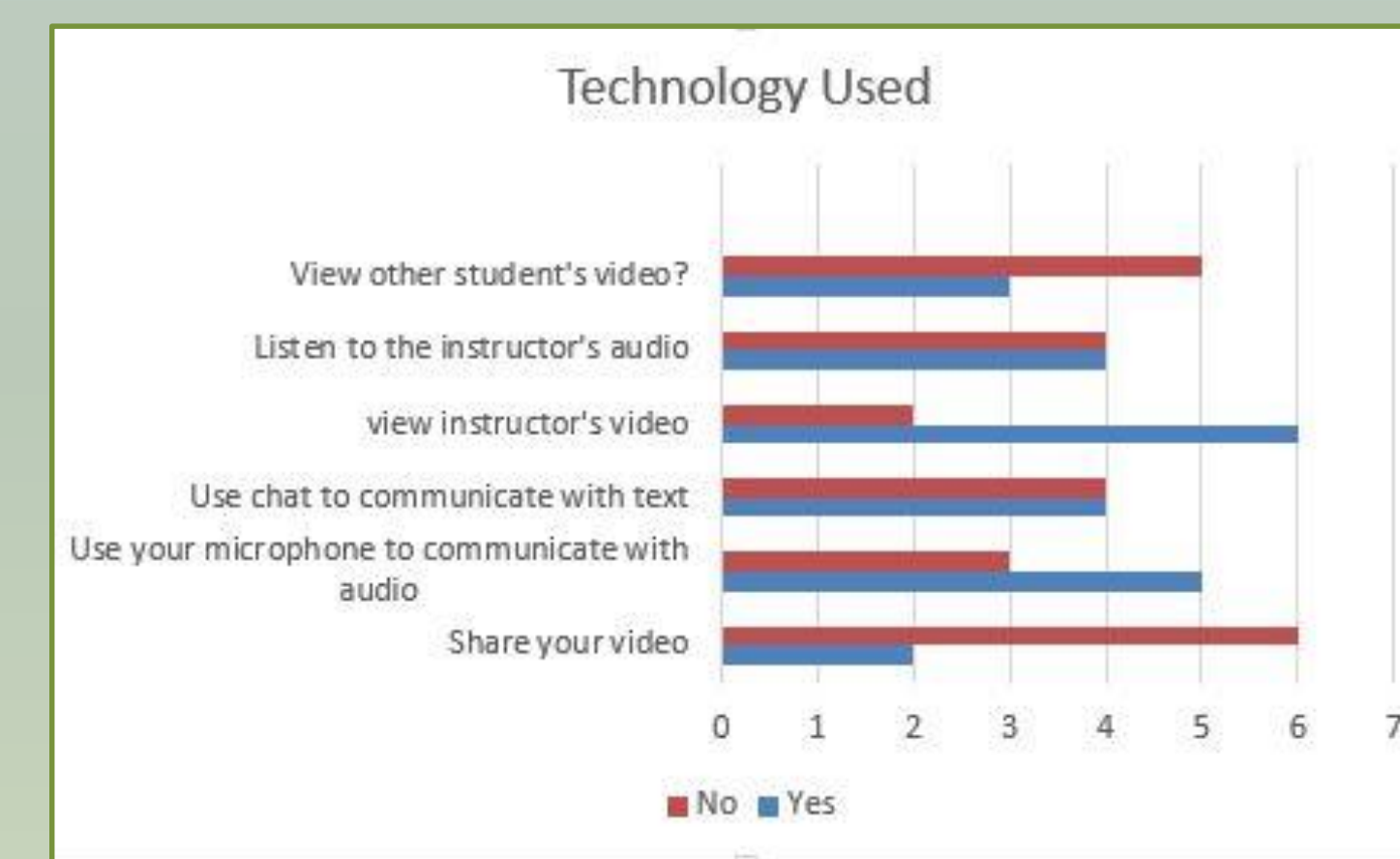


### Technical Quality Experienced by Students
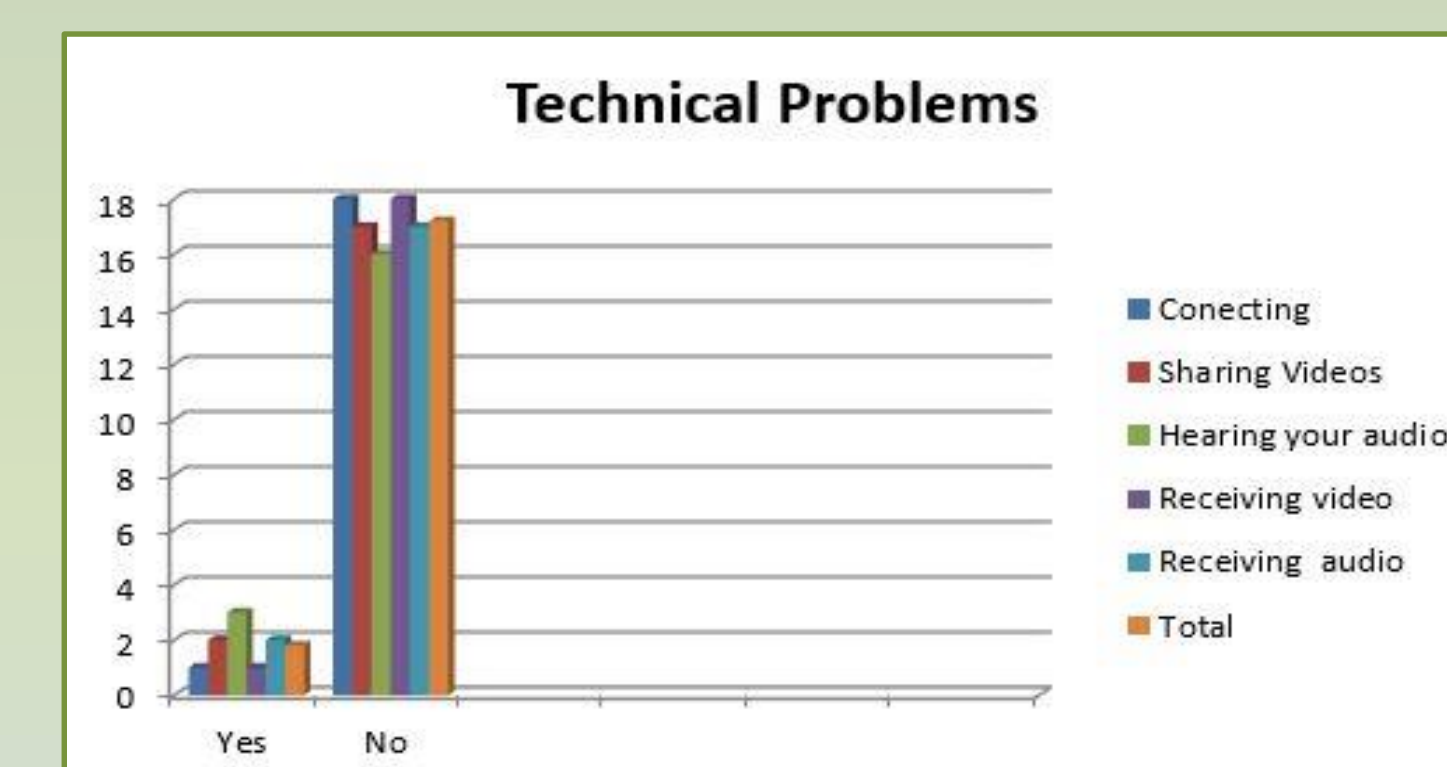


### Level of Student Engagement



## Results Continued

### Observed Video Quality



### Observed Audio Quality



## Conclusions

- Technical quality was acceptable overall.

- Students choose to use multiple technology channels.

- Channels most frequently used were audio and chat (text).

- Students are "mostly" engaged with classmates.
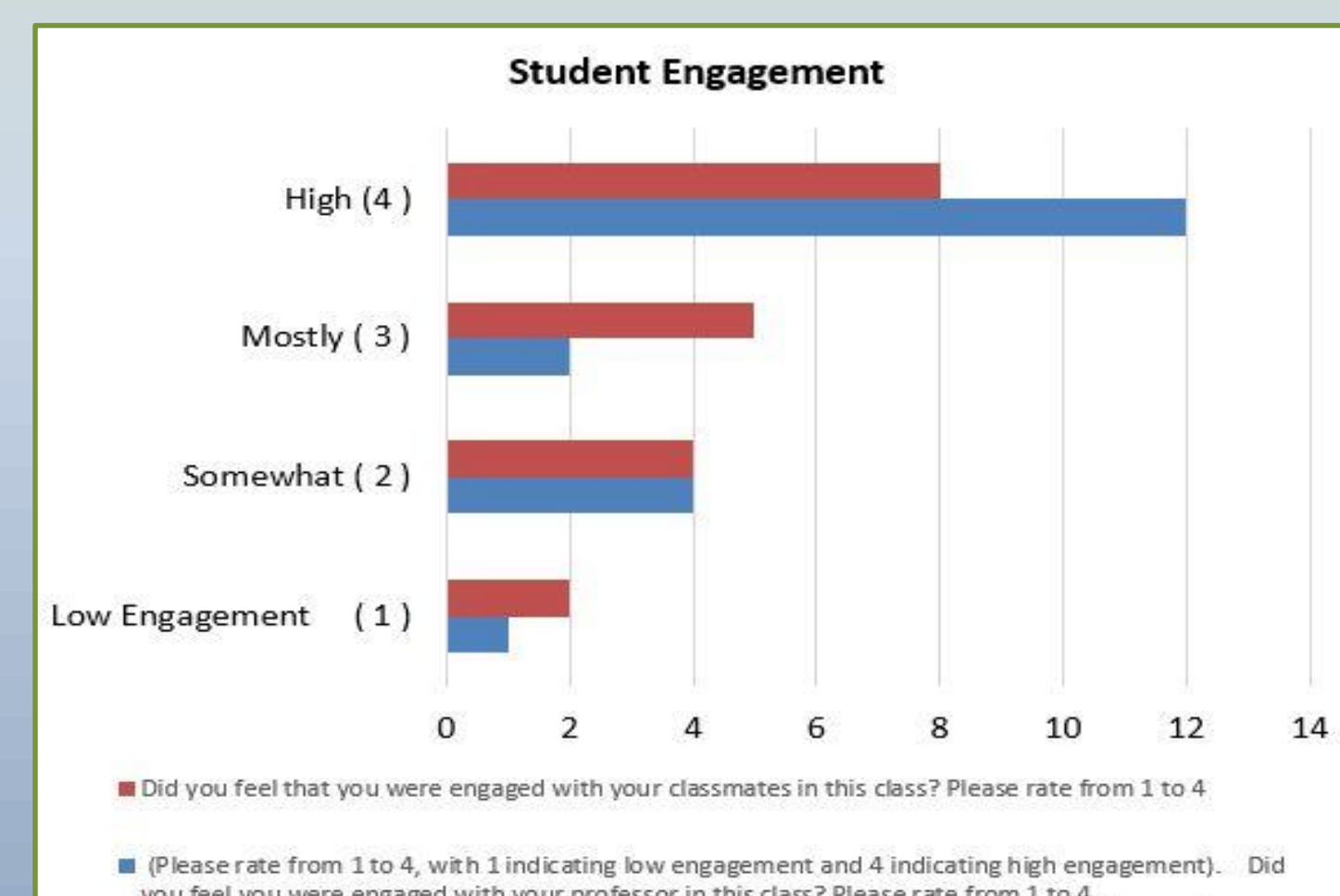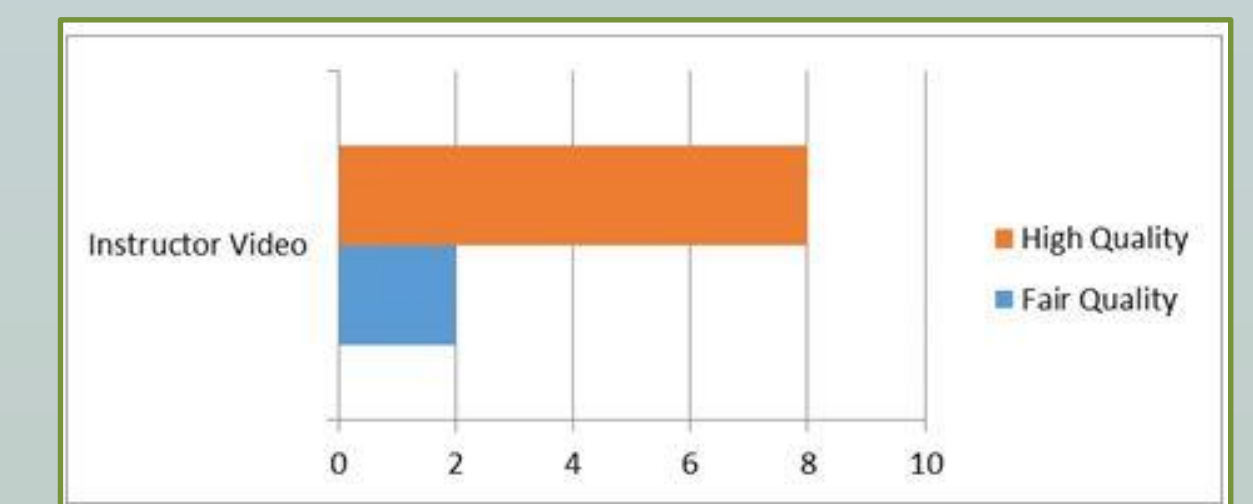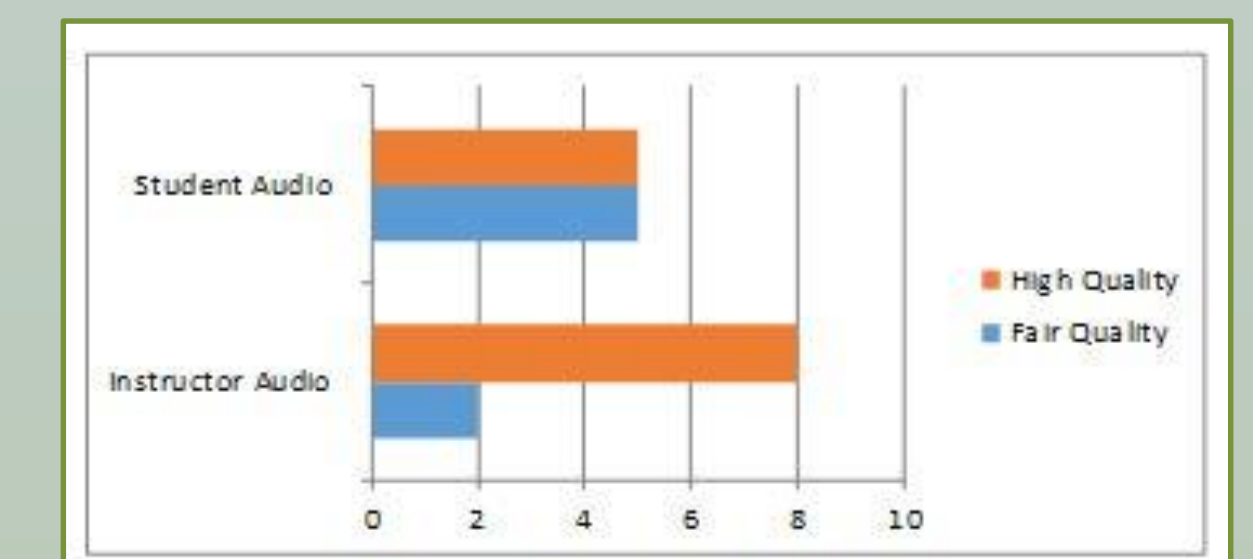
- Students are "highly" engaged with instructors.

- Using technology to facilitate responses improves student engagement.

### Future Research Directions

- The role of choice vs. prescribed means of interacting in synchronous sessions.

- Student satisfaction with the learning in the synchronous sessions as well as overall satisfaction with the course.

- Instructor skill with technology related to student satisfaction with hybrid format.

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