

Fostering a Community of Inquiry using the Flipgrid video response system – a Pedagogical Inquiry

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Abstract: Fostering a learning community via digital environments calls for innovative pedagogical practices using new learning technologies. This paper presents an instructor’s perspective on the use of Flipgrid, a video response system, as a means to build a Community of Inquiry (CoI). It makes a pedagogical inquiry by describing teaching scenarios and evaluating Flipgrid’s applicability for building and sustaining a learning community. Guidelines for task-design and implications for teaching conclude the paper.

Pedagogical goals of building CoI

Creating a learning community is an important pedagogical goal for instructors when facilitating discussions in online contexts. Reliance on asynchronous methods that are only textual and limited in interactivity can lead to a dangerous disconnect. Effective teaching means providing students with a variety of opportunities to learn through multimodal approaches. This includes experimenting with new technologies with the potential to build communities. One such technology is the video response system known as Flipgrid. This paper presents an instructor’s perspective on the use of Flipgrid as a means to build a Community of Inquiry. By describing teaching scenarios and discussing the outcomes, the paper evaluates Flipgrid’s applicability for building and sustaining a learning community.

The Community of Inquiry framework for Instructional design

The Community of Inquiry (CoI) framework developed by Garrison et al., is a well-established instructional design model for the creation of engaging learning communities. This CoI model “represents a process of creating a deep and meaningful learning experience” and identifies three interconnected elements – cognitive presence, social presence, and teaching presence – as essential for a quality educational experience. (Garrison, Anderson, and Archer, 2001).

Current research shows that applying the CoI model in computer-mediated communication might considerably strengthen teaching and learning. (Richardson and Swan, 2003, Mills et al., 2016). To formulate effective pedagogical practices using this model, however, one must consider two factors: 1) the selection of suitable digital tools that can promote CoI, and 2) task design for optimal learning.

Introduction to the Flipgrid tool

Flipgrid is a cloud-based video response tool with many advantages for building an engaged community:

- **Ease of use:** It uses a webcam capture to create video posts, and is quite intuitive and easy to use. While the instructor has to trigger the activity in Flipgrid, users do not need to create an account. They can access the Flipgrid-based task using their computer or mobile devices (iOs and Adroid apps) and immediately begin to participate.
- **Video length:** At the time of this experiment, the maximum length of a video post was 90 seconds. This helps participants provide key ideas with succinctness and avoids the need for fellow participants to watch excessively long videos.
- **Cost:** There is a nominal fee for the teacher to create an account with Flipgrid and use the tool. Multiple grids can be created by the instructor, however, and there is no cost to the students.
- **Shared Learning space:** the most important feature that enables community building is the shared learning space. All the users can submit, access, and view each other's video posts within a common space.
- **Discussion** - In addition to the initial video post, students can continue to dialogue by posting video responses. This helps to generate feedback loops in an asynchronous mode.

Pedagogical applications for CoI using Flipgrid

This section provides pedagogical scenarios of how Flipgrid was used to foster CoI. These scenarios are specific tasks that the authors designed and applied in the classroom, in fall 2016. Although these Flipgrid applications come from diverse disciplines and are anchored to a variety of contexts (i.e., face-to-face, blended, and online), they have the unifying pedagogical intent of creating learning communities, honing critical analysis, and fostering active participation.

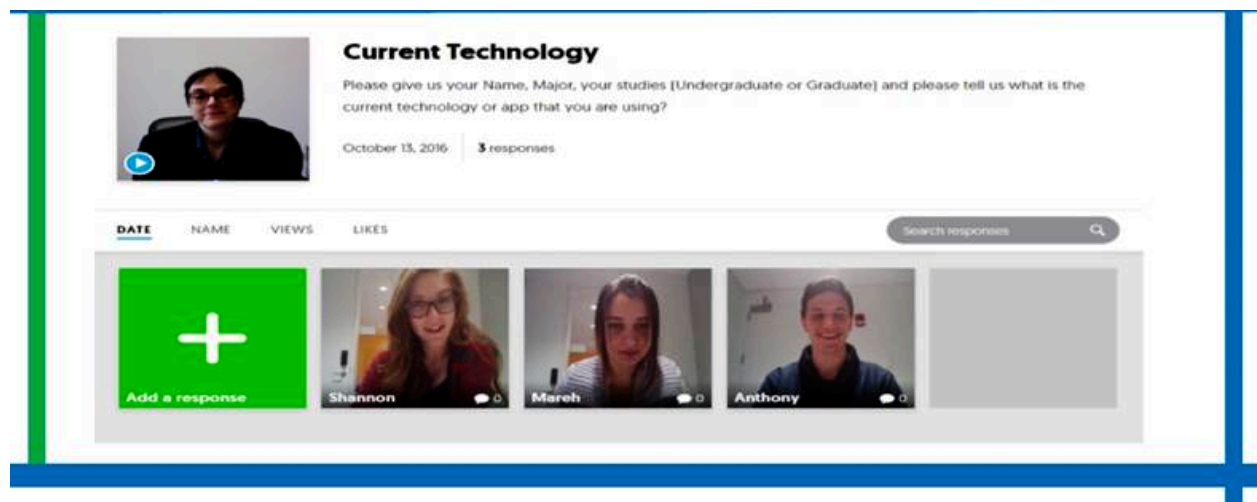


Fig 1 - screenshot of a Flipgrid activity

Pedagogical scenario 1 – Freshman seminar course, face-to-face context

In an undergraduate freshman seminar class with eleven students, Flipgrid was used to facilitate a session on poetry analysis. Students read aloud a short poem by Emily Dickinson, “Tell all the truth, but tell it slant,” and presented key ideas from their reading experience in a 90 second post. The purpose of the reading aloud exercise was to bring out the student’s understanding and appreciation of the literary devices used by Dickinson. Students could not see the Flipgrid posts from their peers until they posted

first. Next, students watched their classmates' video posts and responded to at least one via a Flipgrid post. This task of posting, viewing the posts from peers, and responding to a peer – all via video, contributed to a continuum of interactive learning.

Pedagogical scenario 2 – Foreign language course, blended context

Flipgrid was applied in an undergraduate Spanish Conversation blended course that had eighteen students. The semester was divided into seven units, each corresponding to a specific language proficiency goal. For the unit on “Describe your favorite TV show”, students had to read about TV habits in Spanish-speaking countries, learn appropriate vocabulary, and then share their discovery of a cultural element they learned from the TV show. The following week, students had to respond to two of their classmates. Because Flipgrid can be easily accessed, the instructor linked students with native speakers into the Flipgrid discussion. Students could reply to their classmates, the native speakers outside the class, or the instructor. Students had the option to respond to this response thereby lengthening the conversations, and adding depth to the discussions, similar to real life.

Pedagogical scenario 3 – Faculty development course, online context

In a faculty development course titled “Effective Course Design,” there were twelve faculty participants. For an online session within the course, participants had to present their goals and challenges for course design via Flipgrid. They then had to respond to a faculty participant who came from a different discipline. Faculty members reported that this gave them a useful opportunity to feel connected with a faculty member from a different college, which is normally difficult to achieve given their scheduling conflicts. As a result of the Flipgrid task, participants also discovered that they shared a common goal of “wanting finding ways to facilitate discussions to promote engagement.” The task was designed in such a way that the trigger could also come from the faculty participant rather than the course facilitator. Participants usually responded to each other with minimal or no intervention from the course facilitator, demonstrating self-directed learning, and high motivation for interactive discussions.

Building a CoI – A discussion of pedagogical outcomes

Our description of teaching scenarios shows how Flipgrid can be integrated into the digital environment, not only for online or blended contexts, but also in face-to-face settings. The discussion section below uses the CoI survey instrument developed by Arbaugh et al., (2008), to analyze the suitability of Flipgrid for fostering engaging communities. Even though each element is being discussed separately below, it is important to remember that cognitive presence, teacher presence, and socio-affective presence work together in combination to contribute to the overall quality of the educational experience.

1. Pedagogical Outcomes for Teaching Presence

The CoI survey instrument categorizes teaching presence as having three subscales: design and organization, facilitation, and direct instruction.

In all of the scenarios described above, the biggest advantage to using Flipgrid was the design and organization of the learning space. The asynchronous communication allowed all students to be visible to all other students through the rich video medium. The common collaborative space allowed easy and open communication within the group. The exchanges between the instructor and the students were not lost in nested threads, but were instead openly visible and thereby enhanced the sense of a community. In scenario 2, the task-design

gave students the opportunity to demonstrate their language proficiency. By sharing their experience about Spanish TV shows they contributed to the group learning about cultural issues. In terms of direct instruction, the teacher's presence in scenario 3 could be felt without being a domineering presence. In the facilitation technique, shifts in responsibility were easily achieved when participants led the responses without waiting for the instructor's feedback.

2. Pedagogical Outcomes for Social Presence

According to the CoI survey instrument, social presence has three subscales: affective expression, open communication, and group cohesion.

Especially in online contexts, it is a good practice to develop a social connection between the instructor and students, and among students, before transitioning into the subject matter. In scenarios 2 and 3, students were able to see each other and build channels of reciprocity. The visual presence of all learners within a single space simulated a face-to-face interaction and created the group cohesion that is often lacking in written conversations. Students who participated in scenario 2 observed that because they exchanged ideas in Spanish about daily topics, they got to know each other better. This lowered the affective filter (Krashen, 1982), therefore improving language acquisition. While students stated that the sixty to ninety second requirement was difficult at first, it helped them develop stamina in Spanish conversational skills. Another advantage of Flipgrid over merely recording the answers textually, for example, is that the video medium also gave students a chance to express their personality, visually display their non-verbal cues, and build social connectedness. Not all students are emotionally comfortable communicating through a video response system. In scenarios 1 and 3, approximately 30% of the participants moved from initial resistance to gradual acceptance of Flipgrid. A lack of comfort level with video-based participation could be a barrier to building interpersonal relationships.

3. Pedagogical Outcomes for Cognitive Presence

When measuring cognitive presence, the CoI survey instrument divides it into four subscales: triggering event, exploration, integration, and resolution.

In scenario 1, student posts clearly identified the literary devices of the Dickinson poem such as style, rhyme, and metaphor. Elements of metacognition were evident from how the students connected the literary devices to the course's seminar of "truth and right action." Short presentations can be time-consuming when done synchronously in face-to-face settings. The asynchronous nature of the communication gave more time, and allowed for reflection and analysis. In scenario 1, students pointed out ideas from their classmates that had not occurred to them. In scenario 2, students constructed new meaning through sustained communication, and showed cognitive presence with language proficiency. When faculty discussed common goals and challenges in scenario 3, they were drawing upon knowledge from diverse disciplines and sources to analyze their teaching practices. All of these examples showed evidence of the three levels of cognitive processing postulated by Chi (2009) - active learning by formulating a new idea, constructivist learning by drawing inferences or linking ideas by watching their peers' post, and interactive learning by co-constructing analysis as a cohort.

Factors to be considered for pedagogical effectiveness

Although students registering for online courses want a high level of engagement from their instructor and fellow students, they may not always be ready to participate via video posts. Some students stated they were not emotionally comfortable with recording themselves. When facilitating discussions online, a primary goal is to make it accessible to all learners. Flipgrid

does not have built-in captioning services for students with disabilities, for whom such a service is essential. It is possible to link with a vendor that provides caption service, however. If video posts don't call for interaction, students might post their video comments and yet not feel a sense of reciprocity or connectedness. Merely using the Flipgrid tool to record welcome messages without moving beyond this stage of communication also cannot produce the metacognitive learning to which the CoI framework aspires.

No learning technology, including Flipgrid, can create a learning community by virtue of its technological capabilities. The task design is also critical, hence we recommend that these factors be considered for enhancing the impact on student engagement: one must not assume that students are emotionally comfortable with using Flipgrid. A safe and comfortable environment for the students can be created by describing the nature of the task, posting video tutorials on how to use the tool, checking on emotional comfort level at the very beginning of the course, and continuing to do so periodically. Depending on the course design, the instructor's facilitation methods, and the level of student involvement, peer discussions can foster deep learning. Since the mode of communication is asynchronous, this task must be scaffolded with other types of tasks for educational effectiveness.

Conclusion

Current research has shown the potential for Flipgrid to be an effective tool for active learning when compared with written responses. (Devers et al., 2016). By virtue of its ease of use, shared learning space, and video-based interactive capabilities, Flipgrid offers advantages for instructional design to foster CoI. Even if the comfort level with using video to communicate cannot be assumed, the asynchronous video communication can greatly enhance engagement and foster active learning. The pedagogical intent and task design however, are crucial to achieving a CoI.

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