STEM - FIT

FORUM FOR INCLUSIVE TEACHING

02/8/2020

CONCEPT

The community of Inquiry Framework

The community of inquiry (CoI) framework, first introduced by Garrison, Anderson, and Archer (2000) to describe a process for constructing meaningful and effective online learning experiences has three overlapping and interconnecting components:

- **Social presence** is about building relationships within the online community and is achieved by giving students opportunities to connect with their peers and instructors, communicate in a safe environment, incorporate their personalities into their work and feel like a member of the online community.
- **Cognitive Presence** relates to curricular activities that allow students to construct their own knowledge through discussion, reflection, problem-solving, and other deep-learning tasks.
- **Teaching Presence** describes the strategies that instructors use to incorporate and facilitate social and cognitive components as they strive to provide meaningful online learning experiences.

Importantly, a *participatory equity* lens should also be applied to the CoI framework - participatory equity refers to "a fair distribution of participation and opportunities to participate within the learning and teaching process" (Reinholz and colleagues, 2020). Whether teaching online or face-to-face, mounting evidence from the active learning literature suggests these practices may have unintended consequences for minoritized populations if equitable participation is not considered.

TIPS AND TOOLS

Participatory equity was considered by Reinholz and colleagues in their 2020 assessment of a pandemic crash course offered to faculty at San Diego State University (SDSU). Below are examples of strategies, aligned with the CoI framework, that SDSU faculty used to promote equitable participation in their synchronous online classrooms. In subsequent editions of STEM-FIT, we will highlight NSM faculty and describe the practices (teaching presence) they are employing to enhance social and cognitive presence in their online classrooms.

1. **Re-establishing norms to encourage participation:**
   a. Provide or collectively agree to Zoom Netiquette guidelines, and discuss how you would like students to communicate with you and each other during class (using the chat, raising the virtual hand, raising a physical hand, etc.).
   b. Use the "reactions" or chat to enhance social presence.
   c. Wait for "five hands" before calling on a student to answer a question.
2. **Using student names:**
   a. Ask students to provide the name they wish to be called on their video feed.
   b. Use students' names to bring them into discussions during whole group sessions, or use a student's name when giving them credit for a contribution in a breakout room or in the chat.
3. **Using breakout rooms:**
   a. Keep consistent breakout room groups to promote stronger social bonds.
   b. Structure the breakout room assignments. For tips, see "Teaching: How to make breakout rooms work better" in the references.
4. **Leveraging chat-based participation:**
   a. Start with the chat to broaden participation, then ask certain students if they would like to elaborate out loud to the class.
5. **Using polling software:**
   a. Use polling software (e.g., Poll-Everywhere) to have students solve problems on their own while monitoring responses to determine when most or all have completed the problem.
   b. Have students solve a problem on their own and answer in the chat. Send a poll to gauge understanding or determine how many students need more explanation.
6. **Creating an inclusive curriculum:**
   a. Connect curricula to students' lived experiences.
   b. Intentionally design course content; validate students' identities, experiences, ideas.
7. **Cutting content to maintain rigor:**
   a. Reduce the number of problems to solve in class, give students time to solve them, and discuss their answers and logic with others.
   b. Trying to cover too much can reduce equitable participation!

RESOURCES

- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education model. The Internet and Higher Education, 2(2-3), 87-105.
- Reinholz, D. L., Stone-Johnstone, A., White, I. Sianez, L. M. & Shah, N. (2020). A pandemic crash course: Learning to teach equitably in synchronous online classes. CBE - Life Sciences Education, 10 (4).
- McMurtrie, B. Teaching: How to make breakout rooms work better. (2020). The Chronicle of Higher Education.
- Community of Inquiry website: https://coi.athabascau.ca