Effective Practices for Designing and Implementing Synchronous Active Learning Activities

GOAL: To understand the purpose of active learning and consider various aspects of designing and implementing synchronous active learning.

What is active learning?
Active learning is an umbrella term that encompasses several different teaching approaches, all of which shift the focus from the teacher delivering the course content to the student actively participating in their learning and interacting with the course content and each other. Active learning involves students “doing things and thinking about the things they are doing” (Bonwell & Eison, 1991).

Why use active learning?
Research supports the use of active learning, with positive outcomes for students including:

| Learning & Skill Development | Higher retention of content and skills; deeper understanding of concepts; increased critical thinking, problem solving, communication, interpersonal skills |
| Performance                   | Improved performance on assessments                                      |
| Inclusivity                   | Decreased achievement gap for underrepresented and first-generation students; increased course completion and pass rates |
| Motivation                    | Higher enthusiasm and more positive attitudes towards learning              |
| Community                     | Builds connections and a sense of community through interactions            |

(Freeman et. al, 2014; Prince, 2004; Michael, 2006; Theobald et al., 2020)

Instructors benefit by gaining more information about students’ understanding, allowing for real-time feedback and support to clarify concepts and misconceptions.

How do I select an active learning activity for my course?
Key elements to consider are the:
→ purpose of the activity, particularly related to course learning outcomes and assessments
→ class context (class size, delivery/engagement mode)
→ duration of the activity and impact on other aspects of your course
→ level of interaction (independent, collaborative, or both)

Both individual and collaborative active learning serve important purposes within a course.

Individual activities are easier to set-up and implement, allow students to reflect and check their own understanding, and the instructor can assess each student’s level of understanding or skill.

Collaborative activities offer students opportunities to develop their understanding through a variety of perspectives, skills, strengths, and experiences, and build essential skills like teamwork, communication, and collaborative problem solving.

Collaborative activities can be more challenging to coordinate, support, and assess. For guidance around effective group work, see the Group Work section of our Adapting your Assessments guide (pg. 34-35).
Checklist for designing and implementing synchronous active learning activities

**DESIGN**

- **Start small:** Begin with quick, low stakes (or no stakes) activities so that you and your students get comfortable with new ways of learning and different uses of synchronous class time.
- **Start with your students in mind:** What’s their prior knowledge of the topic? What level of guidance will they need? What’s their experience with active learning activities?
- **Accessibility:** Minimize barriers to participation and offer diverse ways for students to engage.
- **Technology:** What technologies and tools will you and your students need?
- **Group management:** If using groups, how are groups formed, how will support be offered to all groups during the activity, and how will you set groups up for success?
- **Timing:** How much time is needed to introduce the activity, for the activity itself, and to wrap up?
- **Deliverables and assessment:** What contributions or deliverables do you want from the activity? How many submissions are expected (e.g., each individual, one per group)? Will they be graded?

**INTRODUCE THE ACTIVITY**

- **Be transparent:** Explain why you’re incorporating this activity, the goals and intended benefits of the activity, how it will be assessed, and how it connects to the course outcomes and assessments.
- **Introduce the activity:** Provide clear instructions and expectations, especially for group activities.
- **Specify the deliverables and assessment:** If students are submitting something, how will they be collected, who submits the contribution (e.g., every individual, the group), how will they be graded?
- **Clarify your role:** Inform students of how, when, and where they can get support during the activity and what they can expect from you during the activity.

**FACILITATE THE ACTIVITY**

- **Be present:** Provide guidance and support, particularly from groups or individuals who seem stuck or are not participating.
- **Clarify common questions and misconceptions:** Pause the activity and provide clarification to the whole class when there is confusion or if similar questions are arising.
- **Wrap up and debrief:** Gather feedback from students about how the activity went, and reflect on what went well and what needs to be changed.

**Addressing Student Resistance to Active Learning**

Students may resist active learning due to prior negative experiences or because active learning shifts their expectations and experiences regarding their role during synchronous class time. To address or prevent student resistance to active learning and to encourage participation:

- Explain the purpose of the activity and potential benefits or value for students
- Preview what might be challenging
- Clearly describe the process and what students are expected to do and produce
- Invite questions
- Provide support and guidance by checking in with students

**Additional Resources**

- Active Learning, Western University
- Enhancing Interaction in Live Online Classes, Irish Universities Association
- Planning and Developing Learning Activities, Boise State University

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