Active Learning and Peer Learning

What is active learning?¹

- An approach to instruction in which students engage the material they study through reading, writing, talking, listening, and reflecting.
- Contrasts to "I lecture, you listen and absorb" model of instruction
- Students not only participate in their own learning, but are at the center of it
- It has been said that "learning is not a spectator sport"—or, to put it another way, learning is not about filling a student's head with knowledge as you would fill a jug with water
- Learning is a process, and students will learn better, understand better, and retain more if they are given opportunities to be actively engaged in that process
- Active Learning takes this into consideration by ensuring that students apply and use the information that they are presented with (or discover)
- As a TATP .pdf, "Active Learning Activities and Adapting Teaching Techniques" points out, "Evidence shows numerous benefits of using active learning techniques: It increases students' satisfaction and positive attitude towards course material as well as their self-confidence and self-reliance ...; motivates students to be engaged learners ...; increases content knowledge, critical thinking and recall of course content ...; allows for inclusion of different learning styles ...; increases enthusiasm for learning in both students and instructor ...; [and] gets students involved in higher order thinking, such as analysis, synthesis, creative thinking, adaptability, problem-solving, etc. ..."
- Students learn better by "doing" and having plenty of opportunities to clarify, question, apply, and consolidate new knowledge
- This is something that can be done in and through writing, thus erasing the writing vs. content dichotomy by using writing instruction to transmit content
- Typical activities include group discussions, problem solving, case studies, role plays, journal writing, and structured learning groups.
- It can be done in tutorial, lab, or classroom, and can involve individual activities, paired activities, informal small groups, or cooperative student projects

¹ This material used in RGASC Writing TA Training sessions.

Benefits include:

- Improved critical thinking skills, increased retention and transfer of new information, increased motivation, and improved interpersonal skills.
- Plus, students tend to enjoy these sorts of activities, which makes them more receptive and more engaged in the course/tutorial

Writing is active learning

- The academic world relies heavily, in all disciplines, on writing
- Writing is the privileged means for the interpretation, dissemination, evaluation, and even the creation of information
- In other words, writing is doing—in a university context, you could even see writing activities as the quintessential active learning activity!

However,

- Active learning doesn't mean there is no planning or supervision. You need to design your tutorials with consideration of what you want your students to gain from the exercises or materials presented
- This can be done backwards—i.e., start by thinking, "what do they need to walk out of the tutorial with" and proceed from there to design activities that will help them learn the information or skills and give them practice in using the information or skills
- Keep in mind that this applies to process and form as well as content. Working
 in a small group to put a report together teaches students about groupwork/collaboration and about the structure, goals and language of the report
 genre, as well as about the material in the report
- (Note: you don't have to explicitly tell students this for it to work!)
- It will also help if you can identify how the writing work reinforces or develops course outcomes identified on the course outline: this gives them both an incentive and a baseline

10 Questions to consider when designing an activity:

- 1. What are your objectives for the activity?
- 2. Who will be interacting?
- 3. When does the activity occur during the class/tutorial?



- 4. Will students write down their answers/ideas/questions or just discuss them?
- 5. Will students turn in the responses or not?
- 6. Will you give individuals a minute or so to reflect on the answer before discussing it or will they just jump right into a discussion?
- 7. Will you grade their responses or not?
- 8. How will students share the paired work with the whole class/tutorial?
- 9. How will you know students understand or are confident in their understanding?
- 10. How prepared do students need to be to participate?

Best Practices:

- Take risks.
- Start small and be brief.
- Get feedback after a new activity
- Start on the first day of class (or early in term)
- Be explicit with students about why you are doing this and what you know about the learning process.
- Request students vary their seating arrangements; use different grouping techniques

- Try to use questions from in class activities on tests, and vice versa
- Negotiate a signal for students to stop talking.
- Randomly call on pairs / groups to share.
- Find a colleague (from the RGASC!) to plan with (and perhaps teach with) while you're implementing active learning activities.

"But tutorials are already active learning ..."

A common complaint regarding bringing in peer work goes something like this: "tutorials involve discussion, therefore they already include active learning, and therefore no elaborate, formal peer-learning techniques are needed." How do you feel about this?

Personally, I would say that discussion-based tutorials are often NOT active. Instead they often involve one or more of the following:

- Guessing games (what is the TA thinking?)
- Bull session (students pointing towards what TA is thinking)
- One or two students dominate
- TA dominates (86% of time according to one study)
- 10% of students dominating 75% of discussion (in another study)
- Many participants plan next question rather than listen to discussion



Keep in mind

- Writing activities by their nature involve pausing to think, and pauses can be useful to allow students who think more slowly (or who aren't as familiar with English) to gather their thoughts
- When students are writing individually, they each are producing something, as opposed to a group discussion where quieter students might not have the chance to "produce" anything
- When students are writing collaboratively, setting up divisions of labor or clear processes for creation and discussion can help ensure that everyone contributes

4 Writing process-related activities:

- 1. Group Brainstorming: small groups brainstorm evidence to be used for sample essay (with prepared thesis); instructor then leads larger group discussion exploring relationship between evidence and thesis
- 2. Interviews: paired interviews with prepared questions about a writing assignment (research question, why is this a good topic, what is thesis, what is road map)
- 3. Think-pair-share: works well with outlines
- 4. Peer Review: response-centered reviews of drafts (note importance of rubrics or guidelines)

Group discussion

- 1. What sorts of peer learning techniques involving writing have you used in your tutorials?
- 2. Which ones worked best? Why?
- 3. Which ones didn't work? Why?
- 4. Can you think of a peer learning activity you might like to try this year?

