

Effective Recitations: The Power of Being Prepared

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Outcomes: To go from good to great, a TA should...

- Be prepared, add pizzazz, incorporate questions, and use summary sheets
- Come up with great material and present it effectively
- Engage and challenge students with interesting practice problems

What is a Recitation Session?

Most of the required (core) classes that undergraduates take in their first two years have recitation sessions, two 1-hour lectures led by a graduate student where students work through problems and bridge the gap between the lecture material and the concepts they will need for their problem sets. What material you cover and how you present it is up to you. It is a serious responsibility but extremely rewarding – be worthy of it!

Topics to be covered:

1. How to make the material come alive? Using demonstrations/video/charts to communicate with students.
 - a. Go for active over static
 - b. Youtube can be your best friend
2. What to do after the lecture?
 - a. The autopsy
 - b. The notes
 - c. Repeat over and over again
3. How to help your students get the most out of the lecture
 - a. Ask yourself what your favorite teachers did
 - b. How can you reduce the work for your students
 - c. The Course Map
4. What to avoid during the lecture
 - a. The Unforgivable Curses
 - b. Are you bored?

- c. Don't confuse but don't oversimplify
5. Selecting topics for recitation
- a. Selecting material for your recitation depends on your option, class, professor, co-TA's, etc. **Communication** is key! Try to find and fill in knowledge gaps.
 - b. Often TA's aren't expected to attend lectures, but it can be extremely valuable for determining what students need to work on.
 - c. It helps to go through topics more than once, so reinforce difficult concepts until they stick. Find new ways of presenting the same information will keep students engaged.
 - d. You can always solicit input from students on topics they would like to discuss further. This also can provide great feedback for the overall lecture pacing.
6. Designing effective problems for recitations
- a. *Think of a time you were given a particularly challenging problem with a rewarding solution. What made that problem memorable?*
 - b. Recitations are an excellent opportunity for you to model your thought process ("Thinking about thinking") and coach students through problem-solving
 - c. Relate course material to things students care about. The more you engage with a funny, interesting or even practical problem the more sticking power it will have.
 - d. Consider multiple ways of solving the same problem, if possible. Avoid "right-wrong" and "plug and chug" solutions.
 - e. Avoid skipping any steps towards your solution when possible, this is extremely valuable to students during this time.
 - f. Give your students a chance to work through problems themselves, or at least set them up, and share with each other.
 - g. Time is often limited, focus on the thought process and consider providing recitation notes with additional details if necessary.

Reference:

Hodges, L.C. (2015). Teaching Undergraduate Science : A Guide to Overcoming Obstacle