

## UW Statistics Dept Drop-in Tutoring

- **Making students feel comfortable:**

Greet students as they enter the Study Center and let them know that you are the drop-in tutor. Tell them your name and ask for their name and what class they are taking. Also, some students have questions but may be hesitant to approach you, so periodically make a trip around the room and ask students if they have any questions.

- **Finding the Appropriate Level of Instruction:**

In general it is better to over-explain and go at a slower pace, than under-explain. Students in intro stat classes come from a variety of mathematical backgrounds and are usually in the study center because they need help. Ask the student which class they are taking and ask to see their course notes or book in order to gauge what level of instruction might be appropriate. For example, explaining confidence intervals to a student in 220 would be very different than how you might explain it to a student in 311. In addition, it may be helpful to ask students if they are comfortable with background/mathematical concepts before beginning your explanation (ex. Before you start explaining confidence intervals, you might ask the student if they are comfortable with standard errors. It would also be good to know how comfortable students are with algebra/calculus).

- **Tailoring Instructional Tools to the Student:**

Some students prefer more intuitive explanations, some prefer more mathematical explanations, so try to find what works for each individual. Each student will require a different approach, but some ideas to get you started include-

- Decision trees for picking an appropriate modeling distribution
- Enumerating specific steps for hypothesis tests
- Drawing densities and shading rejection regions
- Tying probability models to real world phenomenon (flipping coins, urn model, etc)

- **Checking for Understanding:**

After you have explained something, ask the student if they have any further questions. You can also gauge their body language and try an example or re-explain the concept if they look confused. I like saying "You don't look convinced" rather than "You still seem confused" since it shifts more of the onus of understanding on the teacher rather than the student.

- **Written communication:**

Depending on the student, it may be helpful for you to solve the problem on a sheet of paper (which they can take with them). This ensures that they have a correct copy of what you communicated and can refer to it later when they are not in the study center.

- **Working Through Homework:**

Some students may come in expecting you to do their homework for them. This is not helpful for the student and not your responsibility. You can defuse the situation by telling them you are happy to answer any specific questions, but cannot go through their homework step by step. Also, feel free to go through examples similar to their homework if necessary. If a student is particularly persistent, possible responses could be-

- I'm happy to answer any specific questions you have, but can't do your homework for you
- Take your best shot at the question and I can check your understanding (not necessarily the answer) when you're finished
- Are there any problems you've done in class that are similar? Maybe we can take a look at that first.
- Let me help another student first, and I'll stop by later to check back in if you get stuck

- **What if you're not sure?**

If you are unsure about the correct answer or particular concept, it is perfectly okay- some concepts may be specific to a particular class. If you are unsure, you might ask to walk through the student's notes or see similar examples. If you are still unsure, it is okay to tell the student that you are not sure and that they should ask their professor/TA's. And as a good statistician, quantify your uncertainty. If you think you know what the problem is asking for, but are only 75% sure, let the student know so they can work the problem, but can still check with the instructor later.