

How to “Work Productively” on Our Course

Roles in Learning

- Reader / Listener
- Author

1. When you take a class (math or psychology or science) – what sorts of things are you doing in each of those roles?
2. How does each of these roles contribute to the process of creating a solution to a homework or test problem? What goes wrong if you don’t read the question well? What is the difference between being an author and just repeating what you were told without understanding it fully?
3. Do authors read (or watch, or listen to) the things they create? Can you think of a non-math-class example where you created something but then changed it after looking at what you had done?
4. The right kind of questions make it much easier for others to give responses that will help you get better at making your own answers. Consider the following two questions. Which of them would be easiest for you to start answering if someone else asked it (assuming you understood something about the material)? Circle that one.
 - a. I don’t understand anything about this section. Would someone explain it to me?
 - b. I tried to follow the procedure in Example 2 to work exercise 11, but I got stuck on the step that said to describe the shape of the distribution because they didn’t give me like the example did. Would you explain how I should see the shape of the distribution in exercise 11?

(The first question does not give others any idea of what the asker is thinking. But in the second question, the person has described their thinking – they are being an author, and have identified the particular obstacle they have encountered.)
5. Which role is more interesting to you?
6. Which role is more frustrating to you?

7. What do you think you need to do to prepare to be an author in creating solutions to problems on homework or tests?
8. You are supposed to spend about 9 to 12 hours each week productively working on the material for a 3-hour college level course. Only about 3 hours of that is in class. If you could design your experience in those three hours of class time, in how much of it would you be a listener/reader? In how much of it would you be an author?
9. How do you decide what to do with the 6 to 9 hours outside of class that you work on the material for a course?
10. On the Discussion Board, you are expected to ask questions about what you don't understand in the text, the software, and in the homework, and to help answer other students' questions. This means answering them usefully, which means giving help but not usually the full solution – at least not until you have tried just giving some help for them to figure out parts of it on their own.
Writing answers to questions requires both reading and authoring, since you have to figure out what they mean as well as create an answer. Learning to do all of this is a major part of the learning in this class. Do you think you understand what this means well enough to **start trying to do** it?
11. In all of this, I am trying to explain to you what I mean by “work productively” on the course 6 – 9 hours per week. Do you think this will help you? I'm sure you know what it means to work productively in some other things (preparing a meal for your family, repairing your bike, etc.) Can you suggest something else I could say about how to work productively in a math class?