

Teaching Philosophy

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I am still exploring how best to approach the presentation of mathematics to uninitiated parties, but I believe knowledge and enthusiasm are keys. I share my knowledge but don't see my role as a gatekeeper. Instead, I am inspired to see the student as a fellow seeker and prefer to minimize the line between my position as instructor and theirs as student.

My approach to classroom interactions and expectations for student involvement changed when there seemed to be far fewer students exhibiting math phobia at my current institution compared with my previous institution. I now believe in implementing different classroom strategies for different student populations. I am conscious of time constraints (e.g., jobs, childcare duties), learning disabilities, and other barriers and attempt to take these into consideration when planning course requirements. When interacting with learners, I concentrate on helping them develop their own powers of reasoning and improving their self-confidence in validating the accuracy of their own answers. I believe in praising the self-awareness of errors and making myself available to anyone who wishes to examine any topic further.

I try to provide opportunities that allow students to approach math from the point of view of a topic which already interests them. Without interest there is little incentive to understand, but understanding is necessary to improve retention of underlying concepts. I am drawn to written communication and frequently use writing to encourage exploration of math. For example, I have asked students to prepare an expository paper and explain the math used in their topic. I believe such an exercise demonstrates to students the relationship between mathematics and a topic already of interest to them, improves understanding by requiring the student to explicitly explain the meaning of mathematical expressions, and promotes communication skills by requiring them to write. I have also given an assignment in which the student conducts an interview with a mathematics professional and writes an essay about this person. This helps students become aware of reasons for studying math and puts a human face on it. For students who haven't done well in past math courses, these assignments can give them a much-needed boost of enthusiasm.

In short, I am student centered – it's not about me in the classroom, it's about what works for the learners. I value writing assignments. I try to ask leading questions to direct students to piece together answers for themselves. My methods are not static; I explore new strategies to improve retention and understanding.

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