

# Teaching Statement

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A good teacher, in my mind, is someone who can promote active learning among students. Motivation and interaction are the two major factors that should be taken into account in teaching practice in order to achieve active learning. Active learning also requires a dynamic and adaptive approach on the part of the teacher. This can only come about when the teacher is in tune with his/her students' needs and can adapt accordingly.

I believe that effective learning is driven by interest and motivation. Therefore, my primary goal in teaching is to motivate students and foster their interest so as to develop and drive active learning among students. Motivation is best achieved when students are assigned projects that have immediate value and use. In order to achieve that goal, I include hands-on projects in class for better understanding and application of concepts learned. A few examples of such projects include the development of an instant messenger and the game of Scrabble. The practical value of such projects often arouses the utmost interest among students, while at the same time making a great connection between the static technological concepts in books and the fast developing world outside.

Teaching is ideally an interactive process, structured by constant communication between teacher and students. Under such a collaborative teaching and learning environment, the students would be involved in the desired practice of active learning. For instance, in my Java programming class, I would develop sample codes in collaboration with my students after introducing a new concept. The students responded enthusiastically and eagerly, and pointed out through the course evaluation feedback that the collaborative way of developing a program helped them learn better and faster.

Active learning demands active teaching. In active teaching, the teacher takes the initiative to plan the lesson with the students' various objectives in mind. He/she conducts the lesson in such a way that would address the diversified needs and concerns of students in the most effective manner. A case in point would be my experience in teaching theory courses. In my class, not all students are able to grasp the complicated concepts, proofs and algorithms in the short time that is allocated to lectures. Therefore, I prepare my lessons, always remembering to leave sufficient time for reviewing and Q & A. I also am aware of some concepts which are more complex than others and consequently require more time. After years of teaching practice, I can confidently say that I am able to understand my class' needs and structure the course accordingly.

Active teaching also requires a good understanding of students on the part of the teacher. Confucius said more than thousand years ago that a good teacher shall "teach students according to their aptitude." As a cultural inheritor of Confucianism, I include the humanitarian principle into my teaching philosophy that challenges the traditional methodology of teaching by introducing flexibility and innovation.

I have taught courses for a varied audience consisting of both graduate and undergraduate majors as well as non-majors. There is, I have found, not a single teaching strategy that applies to all cases. The graduate students are generally more motivated and ready for challenges, whereas the undergraduate students are in need of more encouragement and appropriate guidance. For non-majors, the critical factor is to be able to make the materials relevant to their major and keep them at a manageable level of difficulty. The key requirement for computer science majors however is the ability to reach beyond the textbook after familiarizing with the concepts covered in class. A good teacher, I believe, shall take all those aspects into consideration when preparing a course.

Thus, active learning and active teaching complement each other on reciprocal terms. Combined together, they develop into a potent and effective teaching mechanism that encourages and empowers students to not only understand the concepts of the subject that is being taught to them but also be able to apply them in a practical and real world setting. I believe with my diverse teaching experience I have the background necessary to not just be a good teacher but also be one who is able to adapt and innovate as the audience demands. I am confident I will be able to motivate students to want to learn the concepts and ideas in any course I teach.