

A Statement of Philosophy for Learning

Being engineer has always been accompanied with a great deal of pride and responsibility. However, being a successful engineer in a modern world with rapidly changing technology, globalization, outsourcing, and corporate downsizing is determined by many factors. The requirements for educating those engineers are consequently greater than they used to be just 10 years ago. With this in mind, I consider that engineering faculty has an obligation to our students, to the society, and knowledge in general, to enable potentials of individuals for creating a better future. As an educator, I believe that I should foster the development of “a state of the mind” and wide range of skills that modern multidisciplinary “new generation” engineers need.

It is generally known that education, as a significant part of each individual’s lifetime, has the key role in that individual’s identity. I am aware of the relation that identity has towards motivation and cognition, and the role of socializing agent that I as a teacher have. I am also aware of students’ diversity in cognitive levels and learning styles, and I support a belief that the diversity can lead to a better learning environment. Furthermore, I am guided by the premise that students tend to rise to the expectations you pose in front of them. In my lecturing experiences so far, I have tried to create an environment with the joy of learning and based on the constant interaction with students. All these components are an integrative part of my curriculum development and teaching approach.

In the curriculum development, I emphasize on the shared learning experience and consequently shared responsibilities. This is the reason I often involve students in the course organization using surveys. Furthermore, transportation engineering is a multidisciplinary field so I often work with students from different fields. This is an additional reason I leave some room in my curriculum for individual variation and adaptation of learning topics. I try to use this diversity to the advantage of learning, using group in-class activities and group projects. My intention is to support the development of teamwork and project management skills, while enabling students to learn problem-solving, redesign, and broader impact by interacting with students from different fields. Furthermore, using in-class activities, such as minute paper or application cards, helps me to assess my teaching effectiveness in addition to student’s knowledge. Finally, I try to utilize the capabilities for online discussions and messaging to enable stimulating exchange of ideas and approachable one-on-one assistance in the virtual environment.

In my teaching approach, I am trying to apply customization for different learning styles, along with including inductive and video-based visual learning. I am strongly against simple covering of the content. This is the reason I emphasize on the students’ need for competence, self-determination and self-actualization by increasing their intellectual excitement through discussions. During the lectures, I frequently rely upon Socratic method of inquiry, with an emphasize on student’s critical reflection. However, I try to maintain positive and cooperative learning environment by transferring my tacit knowledge using anecdotes from research or practice. Furthermore, during the time that I spend with students, I try to transfer my motivation, present my identity as a traffic engineer, and be a role model for their personal development. Through the engagement in an open-ended relationship with students as my colleagues, I try to be assertive, enthusiastic, and fair, so we can all benefit from our common learning experience. In addition to learning in class, I believe in expanding the learning environment on the road network. This is the reason I include a field trip during the semester, planned to provide visual and concrete learning experiences.

As a future engineering faculty, I am aware that academia involves scholarly research as an accompanying part to teaching, so I always try to relate my research back to teaching. I try to

accomplish this with specific in-class examples from ongoing research, or by asking students to bring in creative and unconstrained ideas to conventional research issues. However, I am aware that I have just entered the area of teaching but I am looking forward to my continuous development. I consider myself open to change and self-reflective on my in-class and out-class experiences. In order to improve as a teacher, I try to obtain frequent feedback and opinions from students by using online evaluations. In addition, I am active in attending workshops and webinars focusing on engineering education. In the future, I will try to use my broad education with in-depth experience in transportation engineering to develop customized learning modules for important concepts. Finally, I am aware that there is no single good method of teaching. Being a good professor is not a state but rather a multilayered process with continuous potentials for development. Because of my deep commitment to both knowledge and students, I am prepared to continuously evolve and improve.