**Statement of Teaching Philosophy**

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My teaching philosophy includes four components: encouraging creative and critical thinking, opening channels of communication, illustrating the beauty of statistics through examples, interactive teaching.

**Encouraging creative and critical thinking**. The undergraduate course, “Introduction of Statistics and Data Analysis” did not require much mathematics background. Even the sigma–summation notation could scare more than half the students. At the same time, the first year undergraduate students from Macquarie University, Australia were usually take 4-5 subjects a semester, which did not leave them much time after-class reading and digesting. To inspire them, I brought to the class examples from news and other media and encourage to challenge the correctness of such example. I also put a great emphasis on “getting your hands dirty” in the data-collection project. I encouraged students to start with something they are truly related to, interested in and curious about, and then develop a project topic from there.

For the master-level course, “Statistical Theory”, I encouraged the students to comprehend the mathematical derivation and properties of the methods so that they could think about the methods critically.

**Opening channels of communication**. For the first class at the beginning of each semester, building good relationship, such that the communication between students and myself, is my top priority. In theory, it is always ideally to resolve the struggling of students as soon as possible. The two units above I had taught, the class size was always large. Thus, it is not practical to solve the problems of all the students during the class. I always tried to arrange my consultation hour right after each class. This way had resulted in some really in-depth discussion about the teaching materials. Some students even chose to stay and listen to other students’ enquires.

Email or online discussion had become a major way of communication outside the classes. I tried my best to reply to students question online as soon as possible so that they knew I was reachable when they wanted to study statistics and encounter some difficulties. To make the online discuss under control, I maintained, to my best, an informative website for my class. Most students could resolve their questions through a visit to the class website.

Communication was like an invisible link between the instructor and the students, and the tighter the link, the more would it enhance the teaching and benefit students.

**Illustrating the beauty of statistics through examples**. Statistics is much more than the mathematical formulas. The reasoning and logic show the application value of statistics. For most of the students, the units I taught were their first time studying statistics. To begin each new subject to students, I used the analogy and real life examples to demonstrate the reasons of the method. When I was explaining about the logic of some statistical methods, though they appeared so familiar to me, still observed so many confused faces. I always tried to show my patient by slowing down and using diagrams or some humorous illustrations to explain the concepts again, something for the first learner can understand and remember. Due to the advanced developed statistical software, the students were not necessary to calculate a t-test by hand in their life, but understanding the meaning of a p-value will continue to be quite useful for a long time.

**Interactively teaching**. Lecture notes should be updated every semester. Students are different in their ways of learning and understanding. I believe an instructor should always be ready to adjust the lectures due to meet the needs of the students. For example, if a proportion of students complain about a mathematical formula, drilling a practice example may be helpful; if there is one tricky question in the tutorial exercises, giving some little hints will encourage the students to maximize their effort to solve the problem; if the teaching material appears dully to a particular group of students, adding some interesting examples may brighten it up and make the lecture class more enjoyable and less slumberous.