

Teaching Philosophy

Teachers can make a big difference in people's life. I have a great admiration for teaching as a role in society and I wish to take further part in it.

The main goals that I want to cultivate as a teacher are to promote a growth mentality in students, a respectful and collaborative attitude, an interest in learning, and the self-confidence and skills to develop as capable, considerate, and relationally healthy professionals that contribute meaningfully to society.

A class is a space where the teacher has the opportunity to create and model a safe, inclusive and constructive environment for interaction. A good way to promote this is by openly inviting engagement and participation from the class while providing a framework for discussing the expectations of learners and facilitators. As an example, proposing students to speak by turn ("*rounds*") to introduce themselves and their expectations for the course can be a good way to ensure that all students feel included. Open class discussions, group work or other activities to encourage participation, such as *Fishbowl* or *Brainstorming* are activities that could help promote the active engagement of students in the class while modelling and stablishing a respectful and collaborative environment. In addition, including different types of teaching activities, open options for assignments and a framework for inclusive peer-learning also promotes a more universal and friendly space for learning. The annex document at the end of this Teaching Philosophy section provides an example for guidelines and roles for tutorials, seminars, and group interactions.

I understand learning as the development of expertise, self-confidence, and skills. Regardless of the technological changes and access to worldwide information, the role of teachers is to facilitate this process for students. Until a few years ago, certainly when I was doing my first studies, the focus of education was on transmitting content, i.e., providing access to students to specialized information on a subject. Since then, it has been shown that this approach, where students passively receive information is not an effective or durable way of learning. In addition, currently, specialized information is not only widely accessible, but also very rapidly evolving. Thus, the emphasis for teaching needs to be placed more in supporting students to develop the ability to actively learn about a subject rather than in imparting rigid knowledge about it. Active learning approaches are based in engaging the students in learning objectives and providing them both with challenges and support & guidance to achieve them. Task assignments, peer-learning activities, open discussions, and group work are good ways to involve students as much as possible in their own learning. At this respect, understanding about a subject need to be developed in stages. From my experience as a learner, I believe that the more expertise students develop about a subject, the more ability they usually have for leading their own learning about it. As an example, I believe it is important for the teacher to initially provide a taught lesson with context and knowledge basis for a given subject. This introduction can serve as basis and guidance for further activities. In turn, tasks and activities approached during the class can serve as a basis for further assignments or group work to be carried out by students in their own time. Participative class activities are also important to provide feedback on the learning progress, both for the teacher and the students.

Finally, I believe it is important to consider the motivations and objectives of students in a module. Paying attention to showcase or discuss on the usefulness and applications of the learning content can both motivate the class and help focusing the learning objectives. As a personal example, I only learned the many applications that algebra and numerical methods have on programming, data analysis and all related applications many years after having followed my master's modules. Only then, I was able to embrace studying these methods and actually enjoy it.

Teachers have the power to transmit their values and their passion for learning, day after day and class after class. We can make a big difference in people's life.

ANEX. Example for Guidelines and Roles for Tutorials, Seminars and Group Interactions

Table 1: Tutorial Guidelines and Roles¹

Tutor (key) Roles	Environment – create a safe, conducive setting for self-directed learning Planning – organization and structure of tutorials Clarifying learning needs – relate learning outcomes and objectives Designing a learning plan – that aids students with personal action plans Facilitate learning activities – providing guidance to ensure student learning Evaluating learning outcomes – offer structured and formative feedback in advance of summative assessment
<i>Collectively</i>	Agree/enact/engage etc.
Respect	Listen respectfully Avoid rude, arrogant or patronizing verbal and non-verbal behaviour Be inclusive of all ideas and acknowledge each others contributions
Communication Skills	Present clearly and use words that others understand Identify and attempt to resolve misunderstanding Recognize and respond to group member's verbal or non-verbal communication
Responsibility	Punctual and gives prior notice of intended absence Complete assigned tasks (or negotiate alternatives - were applicable) Present relevant/professional information Engage with group dynamics
Self-Awareness and/or Self-Evaluation	Acknowledge one's own lack of appropriate knowledge Acknowledge own discomfort in discussing or dealing with a particular issue Identify one's own strengths and weaknesses Respond to fair negative evaluative comment without becoming defensive

¹ Based on work at McMaster University, as gathered in the notes from UCD University