Teaching Statement

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During my educational period, I got to be a sharp spectator of my instructors, comparing their distinctive methods of insight and approaches, thinking about their teaching strategies, and assessing which strategies improved my possess learning. By proceeding this investigation through the various education stages, I gradually and purposely amassed a collection of viable teaching strategies. The refining of those a long time of perception and analysis, combined with the lessons I am still learning from my own teaching experience inside and outside Egypt, yields the overriding principle that I strive for in the classroom: clarity – in presenting material, in detailing expectations, and in expressing educational goals.

Developing new educational materials and techniques as well as teaching and working with students are my primary reasons for seeking an academic career. The essential components of an academic career are teaching and mentoring. I believe that teaching should be seen as a discipline in which the role of the professor adopts in response to the level, progress and feedback of the student(s) being taught. A teacher is first and foremost an educator. However, at times the teacher must act as a leader, mentor, a role model or even a peer for the benefit of the student.

My teaching philosophy views education in its many forms as an integral part of both personal and social development. Some students are curious and eager to learn who are easy to teach, but unfortunately not all students in the classroom are in the same state of mind. To deal with this, I believe that engaging students in the learning process is the best solution in such a scenario. Students must be active participants in the learning process, rather than passive receivers and observers. Also providing students with a set of clear and realistic goals improve their thinking and their solving techniques. Challenging and achievable goals gives the motivation for the students to respond in a better manner. Difficult assignments are frustrating and intimidating, while extremely easy assignments are boring, allow students to become careless, and do not give the students any sense of accomplishment.

Nowadays and because of the COVID-19 pandemic, our teaching philosophy should be adapted to online learning. I divide he lectures into two parts. The first part can be done offline by recording the lecture videos and upload them on the cloud while the other part is to make sure that students understood the information from the videos. This can be achieved by having online meetings filled by lots of activities related to the scientific materials explained before and motivate students to contribute remotely in these activities.

Previous experience:

From 2009 until 2015, I worked as a teaching assistant at the Computers and Systems department - Faculty of Engineering – Zagazig University. Through this period, I was responsible for giving tutorial sessions as well as demonstrating lab sessions in many subjects.

As a teaching assistant, I taught programming languages like JAVA, C, C++ and matlab. I dealt with different students who have different interests in computer science in general. I managed the learning process through interacting with students and encourage them to ask questions and discuss different topics related to the course topics. I carried out the learning process of the programming languages through make the student to become familiar with the syntax and semantics of the programming languages that they are studying. Beside the programming languages, I taught advanced computer science and information systems fundamentals.

I also taught hardware subjects like digital logic design, analog control systems and digital control systems for the students in both the computers and systems department and the electronics and communications department. I managed to promote the student level of thinking and came up with different solutions for different given problems, through providing them with examples, homework and classroom quizzes. Through my career as a teaching assistant I supervised many senior students' undergraduate projects.

I taught other computer related subjects such as operating systems, computer architecture and algorithms and data structures to the senior students in the computers and system department.

From 2015 until 2018, I worked as a teaching assistant at the Computer Science department in the University of Liverpool, UK. I was responsible for giving tutorial sessions and lab sessions in many subjects for both the undergraduate and the postgraduate students. The undergraduate subjects are artificial intelligence, computer systems, foundation of computer science and decisions, computations and languages while the postgraduate subjects are research methods, safety and dependability and reasoning about actions.

From 2018 until now, I work as assistant professor at the Computers and Systems department - Faculty of Engineering – Zagazig University. I am responsible for teaching modules like analog control systems and automata theory and compiler design to the students in the department of computers and systems. I am also teaching digital logic design and embedded C programming to the students in the mechatronics department. Moreover, I am supervising engineering projects to the students in the final year in both the department of computers and systems and the mechatronics department. Finally, for the postgraduate students I am teaching advanced topics in automata theory and its applications in artificial intelligence.