

Learning Assistant Contract STEM-TC Program at Towson University

Background

When a professor from a participating department selects someone to serve as a Learning Assistant, that person becomes part of a much larger Science, Technology, Engineering, and Mathematics Teaching Community (STEM-TC) program at Towson University. The purpose of this program is to improve undergraduate education in science and mathematics and to provide opportunities for Learning Assistants to gain an appreciation and understanding of effective teaching. Through their involvement with STEM-TC, Learning Assistants (LAs) will develop active-learning instructional skills, practice those skills, and participate in transforming instruction.

Responsibilities

Learning Assistants (LAs) have four responsibilities within the STEM-TC program.

- **Assisting Student Learning in STEM Courses** - The most obvious responsibility of LAs is to engage in weekly (if possible) teaching activities. These teaching activities might take many different forms, depending on the course(s) to which the LAs have been assigned. Possible teaching activities include: leading and facilitating discussions of small groups of students in classes and/or help sessions, providing test review sessions, and tutoring. LAs will need to use good questioning skills and other teaching strategies to involve all students in meaningful group work. The assumption is that students learn best when they individually engage with the course material by answering questions and forming models that require a synthesis of information. Only by seeking relationships between facts, concepts, models, and their applications will students truly learn the material. Typically, the STEM-TC Faculty Fellows are working to transform the introductory classes to encourage more student engagement with the material and with each other. Learning Assistants will help facilitate this engagement.
- **Participating in an Informal Education Seminar** - To become more proficient in understanding STEM teaching and learning, Learning Assistants will participate in a seminar run by education faculty in the Fisher College of Science and Mathematics. The topics covered in the informal seminar include group facilitation skills, learning processes, and STEM-specific teaching strategies and issues. The required seminar will meet once per week (possibly on Fridays) for approximately 90 minutes.
- **Participating in the Assessment Program** - As a partner in the course transformation efforts; Learning Assistants will be expected to participate in a variety of assessments and questionnaires. The data from these instruments will help track the progress of the LAs' experiences with facilitation and the progress of students in the classes. The instruments will measure conceptual development and attitudinal changes. The information will provide STEM-TC with insights and understandings about the progress of the program.
- **Participating in a Learning Community** - Learning Assistants are part of a larger learning community. To foster a sense of community, they will be invited to participate in many of the STEM-TC events including weekly team meetings, seminars, and other social events. Learning Assistants are important members of the development team and their comments and involvement are essential to the improvement and success of the program.

Support Mechanisms

The responsibilities of a Learning Assistant are great. To help ensure their success, there are several specific support mechanisms built into the STEM-TC Program. Some of these have already been mentioned, including the regular meetings with the Faculty Fellows, participating in the informal STEM education seminar, and being part of the larger STEM-TC community.

Benefits

There are many benefits to participating in the STEM-TC Program as a Learning Assistant. These include both internal and external rewards. Externally, the Learning Assistant position is a paid position, and students are compensated for their contribution. Additionally, participation in the Program helps LAs develop communication skills and skills in group facilitation. The internal rewards include the many relationships that will develop as a result of participation. The LAs will develop a unique relationship with the Faculty Fellows of the courses. Specifically, the undergraduate Learning Assistants will participate in seminars and training sessions with some of the top university faculty who are interested in teaching and learning. The LAs will also develop unique relationships with students as they work to facilitate learning in group settings both in and out of the large classroom settings. Finally, because the STEM-TC program will make a difference in K-16 education, the Learning Assistants can share in the satisfaction of participating in this improvement process.

Summary

The use of Learning Assistants, the transformation of introductory classes, and the implementation of faculty development and interaction opportunities will result in improved learning experiences for hundreds of undergraduate students at Towson University over the next few years. Learning Assistants play a critical role in the success of the STEM-TC program because they interface with every aspect of the endeavor.

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