

## Tutor Assisted Browser-based Learning Environment for Students

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Tutor Assisted Browser-based Learning Environment for Students (TABLES) is a collaborative online synchronous learning center for math assistance. Our proposed project is intended to recreate a MATH tutor center which provides guidance and assistance to students on mathematics concepts. The TABLES project will provide online access in a collaborative learning environment (through a "table"), moderated by a tutor, who is expert in a particular subject domain. TABLES is built to help students and teachers interact in real-time, which affords them the opportunity for group learning which is critical in a math learning environment. A combination of tutor-based and peer assisted learning strategies help students consistently engage in the concepts and learn faster. Site Observations have provided us with several insights into this proposed design solution. TABLES must consist a student and tutor interface each of which must be specifically designed to re create the experience of a physical learning center. Through the help of queues, a virtual whiteboard and innovative chat sessions we intend to improve collaboration across the student population and facilitate a more holistic experience for all individuals involved. The virtual whiteboard is intended to provide a range of benefits such as cross collaboration across geographical locations which has been shown to improve learning outcomes. In conclusion this proposed project, TABLES has the potential to create a MATH repository for common problems and solutions that would eventually assist all new incoming students that join the learning center. By leveraging the advantages of online synchronous learning environments we propose to create a scalable, reliable and efficient learning environment which is able to connect a diverse variety of students with individual expert tutors.

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