

### Compass Tutoring: Online Tutoring Interface

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Synchronous online tutoring has emerged as a means for students to access on-demand content based learning assistance from home, work, or when on the go. This type of service as well as asynchronous online tutoring is becoming more readily available at universities as the technology begins to align with the demand. Research has provided insight into the capabilities of these types of virtual learning environments (VLE) to enhance the computer-supported collaborative learning (CSCL) that has been found to be impactful within the context of mathematics. Currently, the technology is limited as interactive white-boards (IWB) and chat functions do not fully optimize the collective interactivity that many believe is integral to the teaching and learning of mathematics. To refine synchronous online tutoring, VLE, and CSCL research by providing a platform built from our understanding of theories of learning in the context of mathematics we offer The Compass Online Tutoring interface. Compass is intended to provide synchronous virtual support for students engaged with post-secondary mathematics courses and replicates the model currently employed for tutoring and mentoring of mathematics at the Mathematics Assistance Center (MAC) here at IUPUI. This model heightens the potentiality for academic centered peer interactions (ACPI) between peer-tutors and students engaged with the interface. The service also offers customizable navigation for a tutor, allowing them to move between mathematical contexts based on the questions asked and the amount of students interested in the question. Our team believes that the Compass Online Tutoring interface will revolutionize how people think about and engage in synchronous online tutoring for mathematics.

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