Intelligent Tutoring System (ITS) Overview

Introduction

The Intelligent Tutoring System (ITS) is an online program designed to teach basic clinical skills relevant to behavioral interventions and other structured psychotherapies. It was developed based on the ITS creators' own original research, as well as previous research in the fields of learning science, educational technology, machine learning, and knowledge representation. Several studies show that when students are exposed to an intelligent tutoring system as part of their training, they perform as well as students who are trained by seasoned professionals and they demonstrate better problem solving skills and higher self-efficacy in clinical situations.

The ITS utilizes a framework called "productive struggle", which is a scaffolded learning approach that involves practice with clinical concepts and goes beyond passive reading, listening, or watching. In productive struggle, students are given novel tasks that are challenging; the tasks must be challenging enough that the student learns something new in the process, but not so difficult that the student becomes frustrated and discouraged. Recognizing that students learn at different rates, the ITS is able to adapt to each student's pace of learning. The program gradually increases in difficulty as the student better understands the topics, keeping an effective level of productive struggle at all times.

About the Modules

Each clinical skill is taught via an interactive, case-based online module. Module options include: therapeutic alliance skills (empathy, reflective listening, cultural responsiveness), session organizational skills (agenda setting, redirection), intervention skills (enhancing motivation, assigning homework, reviewing homework), and suicide risk skills (assessment and management of suicide risk). Your instructor(s) have chosen the modules relevant to the course you are currently enrolled.

Progressing through a Module

On average, it takes 30-60 minutes to complete a module. However, we encourage you to complete each module at your own pace. Module progress is saved automatically, allowing you to pause and return later if preferred. Each module has a series of questions that increase in challenge as you progress. Each question allows for two attempts; if you are incorrect on the first try, the ITS will provide feedback and guidance for you to review before trying again.

Navigating the ITS

Below is a snapshot of an ITS module. The dialogue boxes contain reminders of how to use the platform's features.

Troubleshooting

We recently made a few improvements to the ITS. As a result, you may come across some technical bugs, which we encourage you to report as they come up (Reporting Instructions below). We appreciate your patience with any bugs you may encounter and thank you for helping us to continually improve the platform.

Reporting Instructions: If you notice an error message or bug, try refreshing the page first. If the issue does not resolve, you can report it to us using the flag-shaped "Report Issue" button (see above section "Navigating the ITS"). This is the most effective way for you to report an issue, as we will be able to see an exact screenshot of the issue, along with system data that may give us a clue as to what went wrong. If the issue is time-sensitive (or if you are unable to use the "Report Issue" feature for any reason), please also follow-up with an email to the Research Coordinator (Ryan Allred) at rallred@uw.edu.