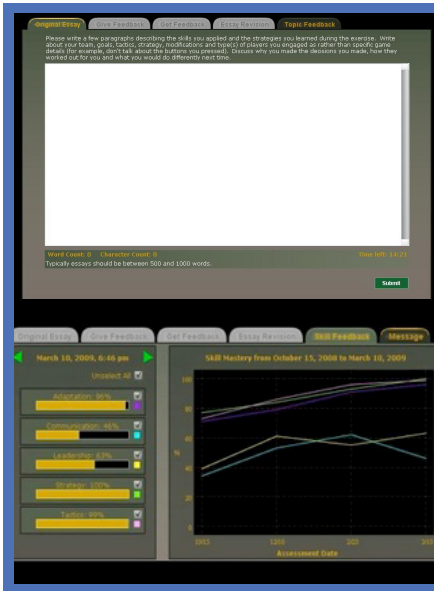
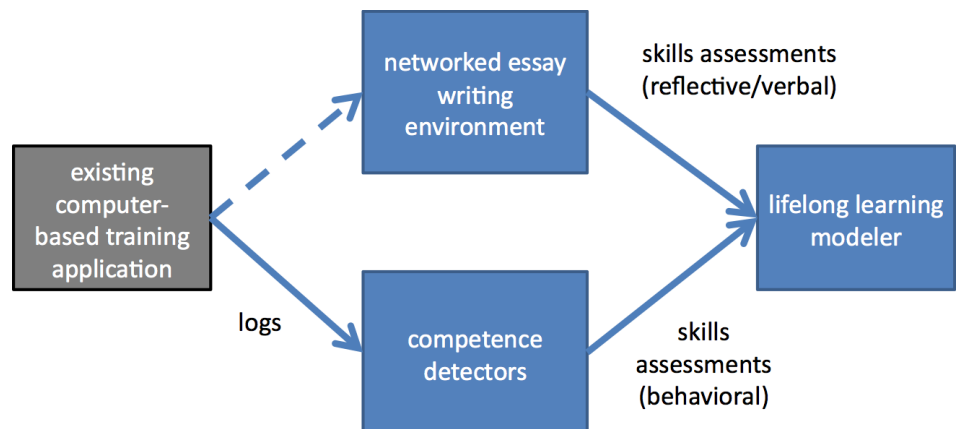


# TACL

## Technologies for Accelerated Continuous Learning



In the near term, TACL will gather evidence from two sources: reflective essays written by the learner about a learning experience and log files from computer-based training applications. TACL research is aimed at automatically grading the essays, detecting patterns of competence in the log files and combining the two into a model of the learner. In this way, the system can recognize when a learner writes well about the domain but cannot perform the tasks in simulation, or when the learner performs well by chance but cannot talk about the domain knowledgeably. An accurate learner model is the first step toward supporting the learner through guidance about the declarative knowledge in their essay as well as guidance about the training application.



### GOALS

- Support learning over long periods of time (e.g., weeks, months, even years).
- Develop artificial intelligence techniques for automated continuous assessment of written data (such as essays) and behavioral data from computer-based environments.
- Create a lifelong learning companion that models learner interests, needs, and experiences and offers support.

### Learning as a Social Activity

TACL's essay writing software allows peer reviewing of essays to drive the revision process. In this environment, peer scores can be used as a source of evidence and automated feedback can be provided to assist in revisions. In the longer term, TACL may leverage social media such as the website of a school, and direct learners toward resources such as online materials or courses they may want to take.