The ICICLE Project: An Overview
Interactive Computer Identification and Correction of Language Errors
Our Goal: Design & Build an Intelligent Written English Tutoring System for Deaf Students

Motivation
- An intelligent tutoring system to tutor deaf users on grammatical principles of written English
- Intended as “Intelligent Grammar Checker and Coach”
- English is distinct from American Sign Language (ASL)

User Interface
- Cycle of user input and system response:
  - User submits writing to system
  - System performs grammatical analysis of text
  - System responds with feedback
  - User makes appropriate corrective actions

Future Work
- Provide custom feedback tailored to specific user model
- Explore user history to obtain detailed information about what knowledge the student has already mastered

Parsing a Sentence & Identifying Errors
- Input: “He teach us.”
- Canned response describing errors (if any)

Response Generation Module
- Parse Tree Node Scoring

User Interface
- Text Entry Window
- Errors underlined and highlighted
- Errors can be expanded to reveal details and explanation

Sample Output
- Multiple Sentences Processed
- Errors Identified & Highlighted
- Possible Parse Trees Visualized

http://cis.udel.edu/~icicle