Enhanced Reading/Writing Tutor:

Hypertext Literacy Supplement for Deaf Students

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Agenda of Presentation

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- Description of Online Product Development
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  - Content Development
  - Video Development
- Demonstration and Uses of Reading/Writing Tutor in Instruction
- Advantages/Disadvantages of Developing Online Products
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Background on the Reading/Writing Tutor

- This tool was developed as part of a "hybrid learning" environment.
  - Web technology is a complement to traditional classroom instruction for deaf students pursuing AAS and BS degrees to develop reading/writing skills at the college level.
  - The original idea of developing hypertext annotations for complex reading assignments developed through a VATEA grant in 2001.
  - In 2003, experimental videotapes for showing poetry and short passages from fiction were added.
  - The full online project development was completed in 2004 through Provost Learning Innovation Grant.

Description of the Online Reading/Writing Tutor

- Technical Development
  - Simon Ting (Instructional Developer)
  - Jonathan Hilliker (Web Programmer)
  - Betty Ting (Web Designer)

- IdeaTools
  - Save development time by building Reading/Writing Tutor on top of IdeaTools, a Web authoring/course building tool with multimedia capabilities developed by Simon Ting at NTID

Description of the Online Reading/Writing Tutor

- Content & Video Development
  - Pamela Kincheloe (instructional faculty)
  - Jill Bradbury (instructional faculty)
  - Rose Marie Toscano (instructional faculty)
  - Miriam Lerner (interpreter)

Uses of Reading/Writing Tutor in Instruction

Reading, especially reading literature, is a challenge for Deaf students.

A. The Reading Tutor implements strategies to enhance student comprehension of texts. The hypertext notes (annotations):
  - Provide historical, cultural, & literary information necessary to understand the text.
  - Alert students to textual elements they may not know such as literary conventions and allusions.
  - Prompt students to reflect on what they are reading through the analytical questions posed.

Uses of the Reading/Writing Tutor in Instruction

B. The Reading Tutor Quizzes help students gauge their own understanding of a text.
- An answer hint button links the quizzes and the readings.
- Students click on the button, a window pops up displaying where the answer can be found.
- Students learn to read the text more closely and weaker readers develop critical thinking skills necessary to read independently.

Uses of Reading/Writing Tutor in Instruction

C. Reading Videos encourage a multimedia experience of reading development:
- Streaming videos provide introductory materials in both ASL and print to allow students varied textual access points.
- Videos also provide concluding commentary on the text and invite students to consider certain themes. For the poetry selections, for example, there are ASL interpretations of the poems so that students have additional help in understanding poetry.

Uses of the Reading Tutor

D. Learning/Author Resources provide students with additional information needed for successful critical reading:
- These include story/play/poem/author links as well as a photo gallery to enable students to have additional contexts for reading.
- The Current Reading Tutor contains:
  - 30 short stories
  - 49 poems
  - 9 plays
  - 16 non-fiction articles

Uses of the Writing Tutor

A. The Writing Tutor assists students in developing self-editing & grammatical skills.
- Students can click on a highlighted error and see
  - An explanation of the mistake in both English text or ASL video
  - Example of how this mistake can be corrected
  - Practice exercises to help students avoid this mistake
- After going through this tutorial, students return to their original paper & make appropriate corrections

Uses of the Writing Tutor

- The Writing Tutor is also integrated into an online homework submission system (the Markup Editor). Students can submit their essays online and receive electronic feedback on strengths and weaknesses.
- The current Writing Tutor database covers 18 common grammatical problems. Some of these are:
  - Articles
  - Run-on sentences
  - Subject/verb agreement
  - Special uses of the present tense
  - Helping/main verbs
  - Etc.

Advantages of Online Product Development

- Advantages for Students and Teachers:
  - the product can be used during class time to introduce materials or clarify a text.
  - it can be used as a supplement to class time, thereby freeing up significant amounts of classroom time for more advanced discussions about the texts.
  - students feel more confident in engaging in discussions because they are prepared.
  - students develop skills in critical reading strategies.
  - ASL videos help those students who learn best through sign language, while at the same time negotiating the written text information.
  - students like a centralized library of annotated texts, quizzes, videos and outside sources and are more motivated to do the additional work
  - teachers have all materials in one place.

Advantages of Online Product Development

- Advantages for Departments:
  - centralized library of resources and texts that can be used by all department members
  - all faculty can contribute to the building of the resources
  - individual faculty can select and import texts and resources that fit with course goals and objectives
  - forges cross-disciplinary sharing

Disadvantages of Online Product Development

- May prove difficult for faculty unfamiliar with or resistant to technology.

- System is complex and requires some training and considerable tech support.

- Students occasionally have technical difficulty with an online system (not all students have private technical access, either).

Student Comments

"The web tutorials and quizzes were very helpful for me to understand everything that I can't even understand. Most deaf people don't understand some sayings, mostly idioms, which is the major problem for deaf people, even myself. The quizzes helped me a lot because then I can see for myself what mistakes I made and knowing the correct answers. Keep it that way!"

Student Comments *(continued)*

"The strength of the videos is it helps me understand even better. That way I won't be confused when I come to my class and make my class slow down."

"I think it's a great idea to have videos online and it helped us to understand the story better."

"I would say [the videos] need to be more visual […] to bring out more creativity to the signed version."

Next Steps

- We would like to apply the model to other disciplines and a greater variety of courses.

- We would like to involve advanced students in the production of new selections, possibly as part of an internship or co-op opportunity.

- We wish to develop more grammar modules (in ASL video format as well as print format) for students at different levels.