Tools for Middle School Students to Create Vignettes

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Motivation

- Vignettes are short stories developed from real life situations
  - Allow students of all ages to analyze various situations
  - Encourage open-ended discussion
- Creating vignettes is relatively costly in terms of time and resources
  - Vignettes are created by web designers
  - Middle school students do not have a natural environment to describe their situations
Screenshot of Vignette

Vignette Submission

The characters in the movie above are trademarked.

If you had been in the position of Ms. Litts, how would you have responded to Mr. Young?

Please view the vignette and after it ends, submit your response.

Your responses are sent to a database, recorded and stored for future analysis. This analysis provides ICCTP with information which can help us better understand ways to develop future vignettes for viewing. Personal perspectives can help assist us with activities and information provided via this portal.

User name: 

Please submit your response here:

Submit (Alt-S)
Project Goals

- Allow vignettes to be created quickly, easily and directly by the user
- Create a non-threatening environment for middle school students (ages 12-15) to describe their experiences
- Develop a system that is extendible to a web interface, easy to setup and cost-effective for public schools
Implementation

- Developed a vignette creation tool
  - Allows drag and drop of character and background images into vignette scenes
  - Dialog is input via an instant messaging interface

- Developed a player for the vignettes
  - Uses Text-To-Speech for the dialog
Implementation (cont.)

- Developed using Java Swing 1.4
  - Compiler and virtual machine freely available
  - Platform independent
  - Easy to make a web applet
- Used FreeTTS for Text-To-Speech
  - Written entirely in Java
  - Uses Java Speech API
  - Easy to set-up
Screenshot of Vignette Creator

Current Vignette Scene

Chat Interface

Character/Background Selections

Character Name/Image
User Testing

- Took the users 12-20 minutes to create and edit a vignette composed of 3 scenes
- Users found the chat interface a very effective input mechanism
- Found the overall interface to be decent for middle school students
Lessons Learned

- Naming the characters and scenes was difficult
- Users wanted more information while working with the interface
- Opinion of drag and drop was split
- Choosing the active speaker in the chat area could be improved
Future Work

- Test with middle school students
- Enable voice selection of characters
- Allow multiple characters per scene
- Give user more control over character locations in a scene
- Use more animation in vignette player (e.g., lips moving to denote the speaker)
- Incorporate a sketching interface for the tool to allow users to create their own characters, backgrounds and animations
- Create an applet for users to create and view vignettes over the Internet
- Incorporate networking into the creation tool so users can collaborate remotely
User Survey Questions

1. The tasks would be easy for students (Ages 12-15)
2. The overall interface is intuitive
3. The interface would be useful for students (Ages 12-15)
4. The chat interface is an effective dialog input mechanism
5. The tool was easy to use in completing the tasks
6. The chat interface is useful in the vignette creation

Figure 1: User Survey Questions
User Survey Results

- Is the interface well-designed for middle school students?
  - Mean = 4.0, StdDev = 0.816
- Is the tool intuitive and easy to use?
  - Mean = 4.1, StdDev = 0.876
- Is the chat interface beneficial to the tool?
  - Mean = 4.9, StdDev = 0.316