

**University of Massachusetts
Academic Year 2003-04
Final Report On Professional Development Grant**

Web-Enabled Explication of Poetry

Diana C. Archibald, P.I.
UMass Lowell
UMass Lowell
Assistant Professor
Department of English
Lowell, MA
Phone: (978) 934-4199
Email:Diana_Archibald@uml.edu

Jesse M. Heines, P.I.
Associate Professor
Department of Computer Science
Lowell, MA
Phone: (978) 934-3634
Email:heines@cs.uml.edu

Other Participants

Ms. Vidhi Bhardwaj, Graduate Student, Dept. of Computer Science, UMass Lowell
Mr. David Peet, Undergraduate Student, Dept. of Computer Science, UMass Lowell

Budget Expenditure Documentation:

Total Funds Awarded		\$ 6,000
Fund Expenditures		
Student Programming Support: Vidhi Bhardwaj	\$ (1,260)	
Student Programming Support: David Peet	\$ (320)	(1,580)
Funds Balance		\$ 4,420

REPORT SUMMARY

The Poetry Explication Web site is up and running at <http://teaching.cs.uml.edu/~heines/projects/explication>. The application is not yet complete, but we have been able to test it with students in both the English and Computer Science Departments and make improvements based on their suggestions.

At present the site allows students to perform the following tasks for Sonnets from the Portuguese #17 by Elizabeth Barrett Browning:

- listen to the poem being read by both male and female voices
- divide the poem into grammatically separate sections (dubbed "chunks")
- answer questions about the poem's meaning
- rearrange words to better decipher their meaning
- paraphrase "chunks" to demonstrate understanding of their meaning.

Tasks still to be completed include:

- implementation of a more robust "back end" for the login procedure so that we can record who is using the program and give students credit for their work
- implementation of data storage and reporting capabilities so that professors can review students' work

The project is running considerably under budget because the main programmer, Vidhi Bhardwaj, was awarded a TA position and therefore was only allowed to charge four hours per week to the project rather than the approximately 16 that she actually worked. However, Vidhi is in the process of parlaying those hours into background work for her M.S. thesis and thus feels fully compensated. Additional funds will be spent on student assistance for programming and testing this summer, but we will still be far under budget. We therefore plan to use the balance of our funds to improve the Web site next year.

REPORT DETAILS

Explication Defined (reprinted from the Project Proposal)

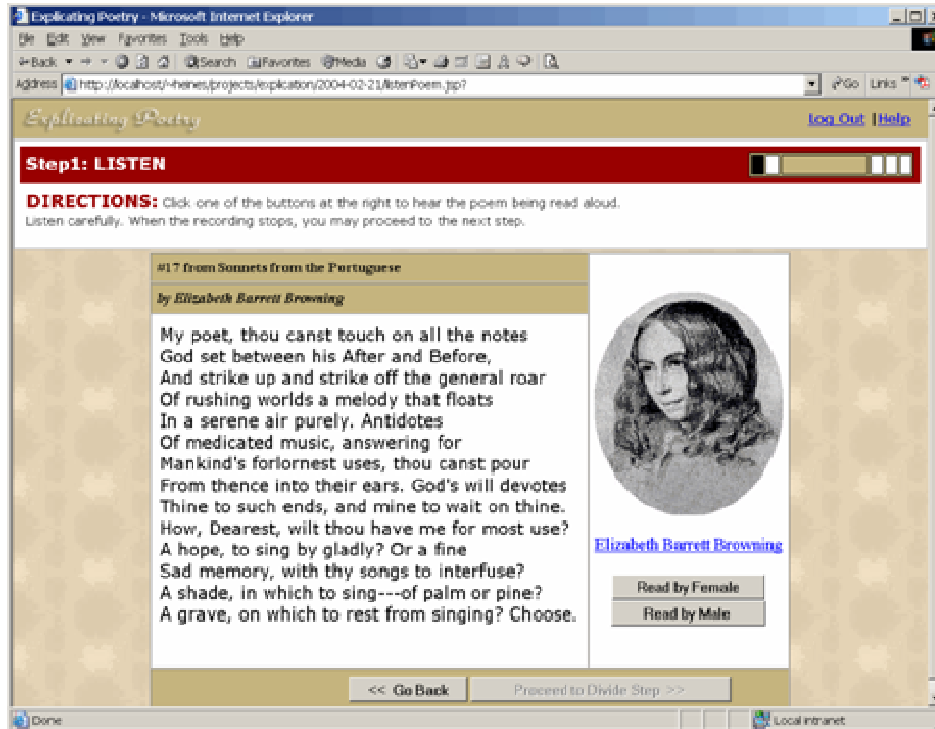
Explication involves a meticulous "close reading" of a poem; it is a commentary, literally an "unfolding" or "spreading out" of the text. Since poetic language is more layered in meaning than speech or prose, explications work to bring concealed meanings to the surface, meanings that may not be readily apparent unless one reads closely and thinks critically. The explication process must begin with a careful paraphrase of the literal meaning of the lines; this step is vital to basic understanding and is the foundation upon which the entire explication is built. A careful paraphrase will mirror the grammatical parallelism of a poetic sentence and the logical relationship between phrases and clauses, and it will convey the multiplicity of meanings for words that cannot be easily translated into prose. Only after this step has been completed can one move on to such things as a deeper analysis of symbolic meaning, poetic devices, metrical variations, diction, and syntax.

Existing Web Page Project Components

The first step in understanding a poem is to listen to it being read aloud. Our application provides the opportunity for students to hear two readings of the poem, one by a male and the other by a female (see Figure 1).



The second step is to identify the structure of the poem. Our application helps students practice this skill by asking them to identify "chunks" in the poem. They do this by dragging the mouse to select all the words they believe make up a single chunk. The application provides immediate feedback on the correctness of the student's choices (see Figure 2) and does not proceed until students have correctly selected all the chunks.



Next, students are presented with questions about each chunk. Again they respond by selecting text and are provided with immediate feedback. (see Figure 3)

Once students understand the structure of a poem, they need to understand the literal meaning of its lines. In step four, students rearrange the actual words of each chunk into a more literal meaning (see Figure 4).

Finally, students paraphrase each chunk to demonstrate that they fully understand its meaning (see Figure 5).

Future Plans

Testing

The site is in need of extensive testing. There are some bugs that we know about, but we plan to pay several advanced English students to test the site and hopefully find other problems.

Additional Functionality

The site's login page is not yet fully functional. In addition, the site does not yet save student responses so that they can be analyzed by a professor. We hope to add these features this summer.

User Interface Revisions

A number of issues surfaced during testing that we have not yet had time to address. Most of

these dealt with the user interface and students' awkwardness in getting used to responding by highlighting parts of the poem. We have some ideas for how to address these issues that we hope to implement and test over the summer and going into the Fall 2004 semester.

Deployment

The system has been tested with students, but it has not yet been used as part of a regular assignment in a regular class. We would like to do this before announcing the system to the world, but this obviously cannot be done until the Fall 2004 semester.

Publication

Profs. Archibald and Heines would like to put together a paper on the development and use of the system. They hope to do this after the system is fully deployed.