

WRITING FOR THE WEB: STUDENT AUTHORS AND AUTHORITIES

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Abstract – Students in BAE 465: Biomedical Engineering Applications have been writing projects for the World Wide Web (WWW) since 1994. During that time, 170 students completed 47 projects. These projects have allowed students to learn technical material and develop web skills, to produce permanent, professional examples of their scholarly work, and to write for a large and diverse audience. The students approached these projects with more enthusiasm and pride than normal term papers and valued their resultant products. With these projects, students have become both authors and authorities in an area of biomedical engineering.

INTRODUCTION

The Internet revolution has changed engineering education. It permeates nearly every facet of teaching, but little has really changed. For the most part, we are merely repackaging what we were doing before [1]. There is more to education than knowledge delivery. Students should be encouraged to become agents of their education by engaging them in the creation and transformation of knowledge [2].

To make use of the revolutionary potential of the Internet and to encourage students to play a more active role in the acquisition of knowledge, students in BAE 465: Biomedical Engineering Applications did extensive research on a component of biomedical engineering. Working in teams of 3-4, they used the web and traditional sources to construct a project based on the most relevant information they could find related to their subject and posted the project on a web site [3]. The students, then, became authorities in their subject area and their authority was represented in their authorship of the web document.

METHODS

Students who had successfully completed BAE 465 were asked to complete an eleven-question, open-ended survey about their experiences with and attitudes towards the WWW-based projects. The completed surveys provided a rich source of qualitative data that allowed for a good understanding of the effects of the project for the students.

RESULTS

Thirty-six of the 170 eligible students responded. All but one of the respondents felt that the WWW project provided a good way to learn about applications of biomedical technology. Most of the students (67%) said that publishing the project on the WWW positively affected the way in which they valued the project. The data provide a useful insight into the sources of value for the students. Generally speaking, the WWW project seemed more important than a regular assignment because students could go to the web and see the projects from previous years and because their own projects would be available to others.

All of the respondents felt that producing a WWW project was more useful than writing a normal term paper. They indicated that it (1) was useful to gain experience in another format and with computers, (2) integrated technology into the course, (3) utilized team work better by allowing more creativity and providing new avenues for group interactions, (4) made the class work seem more important because others would see the project, (5) provided a venue for displaying work to potential employers, and (6) was unique and fun.

CONCLUSIONS

With WWW-based projects, students (1) learn both technical material and web skills from current and previous projects, (2) feel that they have produced something that others can use rather than a disposable project for a grade, (3) learn to write for a large audience with diverse backgrounds, and (4) choose to produce professional products that will reflect well on them for years. Thus, the WWW offers new opportunities for encouraging students to become agents of their education by allowing them to be both authors and authorities in the field.

REFERENCES

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