Service Learning and Technology in TESOL

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Abstract

Service learning is a form of experiential education in which students engage in, and reflect on, activities that address human and community needs. This article explores the natural integration between service learning and the use of information technology. Several examples are discussed from a community college in Hawai'i, where adult ESL students engaged in technology-related service learning projects such as teaching Internet skills to children or producing Web pages for community organizations. As these examples illustrate, information technology can serve as a medium both for carrying out service learning projects and also for reflecting on them.

Many teachers integrate new technologies into instruction with the goal of making learning more meaningful, motivating, and rooted in the personal interests of students. This makes the use of technologies a natural fit with service learning, which has similar goals. In this article we offer an introduction to service learning and report on ways that it can be fruitfully integrated with the use of new technologies in TESOL. Though service learning has arisen in different guises and names throughout the world, in this article we focus on the history and use of service learning in the United States, drawing in particular on our own experiences with service learning at a community college in the state of Hawai'i.

Introduction to Service Learning

Service learning has been described as 'a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development' (Jacoby, 1996, p. 5). Rooted in early 20th century progressivists' views of experiential learning (see, for example, Dewey, 1938), service learning has blossomed into a national movement in the U.S. in recent years, with organizations such as Campus Compact and the National Society for Experiential Education promoting and coordinating service learning projects throughout the country (see Kendall, 1990).

Service learning encompasses two central principles: reciprocity and reflection. Service learning is reciprocal because both parties involved--the community group that is served and the learners who are serving--work together to define the kinds of service and learning which will take place. Through this reciprocity, students can develop a greater sense of belonging and responsibility to a larger community (Jacoby, 1996). Service learning is reflective because the main benefits to learners not necessarily occur from the experience itself, but from collaborative discussion and reflection on the experience. Thus the integration of structured opportunities for reflection is a central component of service learning activities.

Though service learning is a widespread educational movement in the United States, it is little discussed or reported on within TESOL literature or conferences. Perhaps this is in part because of the difficulty of designing service learning activities for ESL students that incorporate reciprocity and reflection. What do ESL students, who lack language skills and are newcomers to a community, have to offer in service? How can ESL students overcome language barriers to engage in reciprocal interaction and planning? And how can ESL students stretch their limited English skills to reflect and write critically about their experiences?

We have found new information technologies to be a powerful tool to accompany the use of service learning in the ESL classroom, for several reasons. First, technology represents an important service that ESL students can offer to the community: even a newly-arrived immigrant with limited English skills can make an important contribution to others by sharing knowledge of technology. Secondly, new technologies can help facilitate communication between students and community groups, thus making service learning more interactive. Finally, information technology, and, in particular, synchronous and asynchronous tools of computer-mediated communication, can be very helpful media to facilitate ESL students sharing of ideas for mutual reflection about their service learning experiences.

In the remainder of this article, we provide concrete examples of how these purposes were achieved by the integration of service learning and technology at a community college in Hawai'i.

Kapi'olani Community College

Kapi'olani Community College (KCC) is an institution of some 7,000 students on the island of O'ahu. KCC serves as both a vocational school and a feeder college to the University of Hawai'i. More than one-third of KCC's students are second-language speakers of English. Most of the ESL students at KCC are children of immigrant families from China, Vietnam, Korea, the Philippines, and other Asian and Pacific countries. Others are foreign visitors from developed countries (e.g., Japan, Germany) who spend their college years in Hawai'i.

KCC has a number of ESL programs, including some focusing on non-academic conversational skills. This article discusses the integration of service learning in the KCC academic program, and in particular in writing courses. A number of English composition sections at KCC are exclusively for ESL students. There are also large numbers of ESL students found in almost any regular English class.

The first author of this article researched the use of service learning and technology at KCC as part of a two-year ethnographic study (published in full as Warschauer, 1999). The second author has been teaching English writing at KCC for 13 years and helped launch both the service learning program at the college as well as the computer-assisted writing program, taught in two special computer classrooms. The courses described in this article were taught in these classrooms, which each include 24 networked computers, a projection system, a scanner, and collaborative writing software (Daedalus Integrated Writing Environment, Daedalus Inc., 1989).

Service learning and technology have been integrated in two ways with ESL writing students at KCC: (1) technology as a component of service, and (2) technology as a medium of discussion and reflection.

Technology as a Component of Service

Many ESL students at KCC are terrified of getting involved in service learning. They fear in particular that their lack of language skills leaves them little to offer the broad community. However, technology skills that students learn at KCC can become an important basis for extending assistance to the community. This has taken place through document production and tutoring.

Document Production

Students at KCC have made use of information technologies to create newsletters, brochures, and Web pages requested by community organizations. In one semester, students produced a newsletter, called Palolo Pride, for a nearby public housing project. Groups of two to three students took responsibility for each section of the newsletter. Each small group selected a section editor, and the teacher chose overall co-editors according to students' previous writing experience. The teacher provided contact names and telephone numbers of community representatives for each section, and then it was each group's responsibility to make the contact and arrange a meeting to gather information for their column. Each student in a group contributed part of the written material for the section. Students used the computer technology in the classroom to compose their stories, edit their work, and design the section. Newsletter editors used desktop publishing software to put together and produce the final newsletter. Photographs and artwork for the newsletter were also scanned or created in the classroom.

During another semester, students worked in small groups to produce brochures, reports, or World Wide Web sites for various community or campus organizations. One group worked with an arts council to produce a brochure about art works and museums on campus. A second group coordinated with a community hospital to help produce a newsletter. A third group worked with the local Alzheimer's association to produce their Web page. A fourth group developed an elaborate Web site for an educational group, the Hawai'i Writing Project. Each group was responsible for interviewing their partners, finding out what kinds of information they wanted published, writing and editing the content, preparing the layout, checking the final copy with their partners, and publishing the work.

Technology in these projects was used not only for production and publishing of the document, but also for maintaining communication with community partners. For example, students used e-mail to initiate and maintain contact with the community partners, to ask follow-up questions, and sometimes to conduct

informal or formal interviews. Students thus learned to use computer-mediated communication to help overcome obstacles of time, distance, and language.

The development and production of authentic documents for community groups has had many benefits for KCC ESL students. First, it has helped students learn to write for a real audience. Whether writing a brochure, newsletter, or Web page, students must investigate who the likely readers are and plan the content based on what those readers need or want to know. Secondly, it has provided students an opportunity to combine learning language with mastery of technology skills, including Web publishing, photography and digital photo editing, or desktop publishing. These skills can provide students an edge in both academia and the job market (and at least one ESL student who has taken this course is now supporting herself by designing Web pages for businesses.) And finally, working on authentic documents has also helped students build positive ties to community groups and resources. Many adult immigrants, due to reasons of language, culture, or time, have little opportunity to learn about the broader community, and often feel isolated from it. Developing a Web page or brochure for a local group allows students to find out more about community resources and feel a stronger connection to the community.

Tutoring

ESL students at KCC have also provided direct tutoring in technology or other subject or skill areas to schoolchildren. In once class KCC students were paired with groups of children from a nearby elementary school (some of them ESL learners as well). The KCC students provided hands-on tutoring in uses of computers and the Internet, including how to use electronic mail and how to search for information on the World Wide Web. In another class, KCC students tutored at a middle school in a public housing project near campus. In this case, the KCC students tutored in whatever area their tutees needed assistance, such as spelling, math, Hawaiian history, or science.

Since the best way to learn something is to teach about it, tutoring served to reinforce the KCC students' knowledge of both the technology involved as well as the vocabulary and syntax required to give this kind of instruction. Tutoring also provided the KCC students with more information about the broader community and helped them to feel more integrated with it. For example, the student who tutored in Hawaiian history had to learn the material herself first.

The computer tutoring project, in particular, provided an opportunity for students to reflect upon the differences in the style of education their tutees were receiving (which involved opportunities for hands-on, interactive learning) with the style of education they themselves had received in their own countries. Students later wrote about their tutoring experiences in essays, with comparison of educational systems one possibility for an essay topic. The tutoring project was also the basis for the final exam, an in-class essay where students were asked to write about the service learning experience, what they had learned from it, and what they would do differently. The final exams were composed at computers in the classroom, and then the students submitted the papers electronically.

Although most students were uneasy about tutoring in English, all learned that they could, indeed, communicate as needed for the project. Several students commented at the end of the class how much greater a part of the community they felt. Most learned that they could give back to the community even though their English was not yet as good as they wished.

Technology as a Medium of Discussion and Reflection

As mentioned earlier, a critical element of service learning is reflection. Through reflection, students can deepen their understanding of issues related to community, technology, service, writing, and themselves.

Encouraging a reflective process in the classroom can be challenging, especially among ESL students. Discussion in ESL classrooms, as in other classrooms, tend to follow the traditional teacher-controlled "IRF" pattern, whereby the teacher makes an initiating conversational move, a student responds, and the teacher follows up (Cazden, 1988). Some teachers make use of written dialogue journals to try to encourage reflection (Peyton & Reed, 1990), but such journals encourage teacher-student interaction more than collaborative student interaction.

ESL students in these classes at KCC make use of computer-assisted discussion to facilitate reflective interaction about their service learning. Using networked personal computers and the Daedalus Interchange software program (Daedalus Inc., 1989), students engage in real-time written conversation to discuss their thoughts, reflections, and questions about their service learning experiences. Computer-assisted discussion assists the reflective process by helping overcome the traditional dichotomy between speech and writing. On the one hand, it is interactive (as speech), thus allowing students to rapidly respond to one another; in fact, it is in some ways, even more responsive than speech, in that many students can write their comments simultaneously, without having to wait one at a time to give their responses. On the other hand, it has the permanence of writing; students can read, and reread, and reflect on the written comments, both during the conversation itself, or for post-hoc analysis (as the discussions can be printed out or saved on diskette).

The teacher participates in these discussions to ask an initiating question and to occasionally offer a comment, but almost all the discussion in these classes is by the students themselves. Topics they discuss include the notion of service in their own culture as compared to that in their new cultural environment, the value of the service learning experience, their thoughts about the community, and the nature of writing for a public audience. Students have shared important insights in these discussions, including how their experience with service learning has helped them to better understand their relationship to others and in some cases reevaluate their career plans (e.g., students in the tutoring projects discussed how they felt about the possibility of becoming teachers).

Computer-assisted discussion has been used extensively at KCC, both among native speakers of English and ESL students. While both L1 and L2 English students benefit from computer-assisted discussion, it has proved especially fruitful with L2 students, who are often shy to participate in oral discussions but who join in more regularly when communicating via computer (Warschauer, 1996; Warschauer, 1999). This allows more full and democratic participation among all participants and thus creates better possibilities for collaborative reflection, which is an essential component of successful service learning projects.

Restructuring the Classroom

The implementation of technology-enhanced service learning is a major challenge in any classroom, and especially in an ESL classroom. Any class would need a tremendous amount of time and support to forge relations with community groups, master new technology tools, engage in community service, and reflect on their experience. ESL students need more time for these tasks, and they also need more support due to both linguistic and cultural challenges.

The types of service learning activities described in this article have been integrated into ESL courses that are dramatically different in structure and organization than the typical teacher-centered community college course. For most of the course, students work in groups to plan, design, implement, revise, evaluate, and reflect on their own projects. Support is provided by the students themselves, who readily help others in their group or in other groups, or by the instructor who serves as an organizer, facilitator, consultant and thoughtful reader of student work. Though it has become a stereotype to say that teachers in the age of information should move from being a "sage on the stage" to a "guide on the side," this change in teacher role is actually achieved at KCC and is probably a requirement if this kind of project-based approach is going to be a success.

ESL students deploy a variety of strategies to help overcome language difficulties in achieving their objectives. If they have difficulty in carrying out an oral interview, they may conduct it by e-mail. They use photographic and graphic skills to complement the texts of brochures and Web sites. They ask other students or the teacher to help them revise their work to bring it up to standards of publication, and they also rely on their community partners to help edit drafts of their writing. They thus learn to draw on and develop a wide range of technical, design, language, and interpersonal skills to fulfill their tasks.

Even with the ideal classroom organization, many service learning projects are complex enough that they are difficult to fulfill in a traditional 3-hour per week one-semester course. Many service learning projects involve forming a substantial relationship to fulfill important tutoring or writing objectives. While such objectives can minimally be achieved in a 3-unit course, options for extending the course--either through a two-semester sequence or through increased hours within a single semester (perhaps by pairing two different courses)--should be considered.

Conclusion

Adult ESL students in the U.S. face many of the same challenges faced by immigrant learners in Australia. Their language learning needs are part of a broader process of cultural adjustment, which includes forging connections in a new multicultural environment. Technology-enhanced service learning projects in the multicultural community of Hawai'i have helped fulfill a combination of goals for adult ESL learners. Students gain both technological and language skills while learning about their new community and making a making meaningful contribution to it. Such projects necessitate a high degree of effort and flexibility from both teacher and students, but provide a valuable learning experience that transcends what normally takes place in the classroom.

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