ESL Students Cross the Academic Threshold: How Interpreting Demographic Data Builds Information Literacy Skills - Three Perspectives

Penny Bealle, Kathleen Cash-McConnell and Bernadette Garcia

Overview

Our successful English as a Second Language (ESL) project at Suffolk County Community College (SCCC) fosters academic literacy by infusing information and computer literacy skills into an advanced listening and speaking course. In this paper, library and ESL faculty, Penny Bealle and Kathleen Cash-McConnell of SCCC's Eastern Campus, plus a collegewide ESL administrator, Bernadette Garcia, share insights on how advanced ESL students construct a demographic study. This demographic assignment requires synthesis of information and images into oral presentations. Each student's final project is the culmination of an incremental process that includes four library workshops. During the workshops, students research U.S. cities and form a learning community as they discuss trends in demographic data and the infrastructure of the various cities.

Our collaboration integrates ESL students into the academic community. The collaboration has built learning communities between the library and ESL departments, as well as between students and their academic environment as they gain the confidence and skills to cross the academic threshold.

Institutional Context

SCCC is a multi-campus institution located on Long Island, New York. Total student population for its three campuses is approximately 20,000, three thousand of whom attend the Eastern Campus. The ESL Programs have been an integral part of the college's academic offerings for twenty years, and currently consist of three distinct programs: (1) traditional non-credit ESL adult education, (2) Intensive English and (3) English for Academic Purposes. In this paper, we are focusing on English for Academic Purposes, which is designed to assist Limited English Proficient students to build academic English reading, writing and oral communication skills. We do this via a two semester sequence of courses in Grammar, Reading, Writing, and Listening/Speaking. Students usually take from one to three of these courses per semester.

ESL students are those whose first or dominant language is not English. Students attending English for Academic Purposes have been identified as having language skill ranges comparable to those native speakers who have been placed in developmental (remedial) academic courses. Their language skill levels in English are not suitable for the rigors of academic study. Some have taken ESL courses in U.S. high schools or in other settings. While a few of the students simply wish to improve their academic English, many are degree bound. A portion already have degrees or some higher education study from their native country. Many wish to attain an associate degree, or transfer into a bachelor or graduate degree program. They all demonstrate gaps in the academic discourse necessary to understand, participate and succeed in content classes. In all cases, students who complete the English for Academic Purposes sequence and continue on with academic studies at the college have higher success rates than their native speaker counterparts in developmental studies (Suffolk County Community College, 2007, p. 141).

Cash-McConnell's ultimate goal in this course is to cultivate her students' academic discourse. Literature in the field of TESOL – Teaching English to Speakers of Other Languages -- distinguishes between Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP). BICS proficiencies allow students to negotiate social and interpersonal goals (Cummins, n.d. "BICS and CALP"). Students with high BICS are often placed in higher level classes than warranted because their oral language proficiency leads to the assumption that their CALP is also high. However, these students often encounter difficulties in content classes because of a "lack of development of academic language skills, which have been

Bealle (*Library Faculty, Associate Professor),*
Cash-McConnell (*ESL Faculty, Professor)* and
Garcia (*Academic Chair & ESL Faculty, Professor)*
Suffolk County Community College [Long Island, NY]

found to lag behind social language skills by as much as five to eight years" (Cummins, n.d. "Putting language," O'Malley, 1990, p.192). Therefore many higher education ESL programs focus on helping students to acquire CALP through the development of academic vocabulary, the improvement of research skills, and the development of public speaking and presentation skills. Increasing the academic literacy of ESL students is integral to accomplishing these objectives. As a result, library participation is vital and can result in positive student learning outcomes as exemplified by our instructional collaboration.

Demographic Project

The collaboration between Bealle and Cash-McConnell is designed to cultivate acquisition of academic discourse. This paper emphasizes the pedagogical value of infusing demographic terminology, as well as information literacy and technology instruction into a three-credit advanced listening and speaking course: EF 06/ESL 016: College Listening/Speaking Skills II. By applying techniques learned from information literacy instruction to their assignments, these students demonstrate competency with intertwined components of academic discourse. Especially important are critical thinking strategies, information literacy competency standards, and the targeted quantitative language germane to demographics and many academic disciplines. Competency with essential aspects of academic discourse is critical, for successful completion of this course satisfies one of the prerequisites to enroll in content courses.

The students gain facility with the required learning outcomes through a series of library and computer workshops, which begin the fifth week of the semester. During the four information literacy workshops, co-taught by Bealle and Cash-McConnell, students engage in research using specified library databases and library-recommended Web sites; select appropriate information resources; prepare MLA style citations; and write an evaluation of an online information resource. Since the students demonstrate an erratic grasp of computer skills when the course begins, Cash-McConnell facilitates numerous computer workshops where they gain facility with hardware such as electronic whiteboards, and software applications such as Microsoft Excel and PowerPoint. Through the workshops, students incrementally acquire the skills to complete the final project, a demographic study in which they synthesize information into digital presentations that are projected onto an interactive whiteboard and orally delivered to the class. Their growing technological competency, coupled with their acquisition of information literacy skills, give them the confidence to use presentation skills in subsequent content courses and to enroll in online classes.

The assignments for this advanced ESL listening and speaking course require students to apply academic discourse and information literacy skills. Cash-McConnell begins the semester with activities to assist with the acquisition of quantitative terms. Then she invites the class to solve a purposefully ambiguous but relevant demographic problem: Why the population has shifted so dramatically in a specific U.S. city. The cumulative demographic study contextualizes academic vocabulary, especially quantitative terms to describe charts and graphs. This focus helps to prepare students for the State University of New York General Education task of interpreting information in graphs and charts, a core component of social and natural sciences.

Having gained familiarity with quantitative terms and demographic phrases, the students are ready to begin their research. A vital part of the course design has been the collaboration with Bealle to infuse the information literacy and critical thinking strategies that are essential for attaining the course objectives. As emphasized by Grafstein (2002), our collaboration clearly demonstrates how "being information literate ... involves being information literate about something"(p. 202). In this case, students apply information literacy skills to prepare their demographic presentation on a U.S. city. In order to get to the point where the presentation can be realized, Cash-McConnell uses a Constructivist approach to present a series of inquiry-oriented tasks to students. Like Woodard advocates (2003), we have developed a learning environment that requires students to: analyze and evaluate resources; explore the "learning resources in their technological and traditional environments;" and create learning communities so students can engage with each other, their professor, and the library faculty at their campus (p.191).

In the first information literacy workshop, using the SCCC library webpage as a starting point, students learn that library databases are appropriate sources for college research. To explore demographic data regarding U.S. cities, we initially direct them to the *Almanac* in the *Facts on File* library database. It exposes them to a well-organized factual database that includes demographic and numerical terms integral to the targeted discourse. Moreover, this site is understandable to those having limited academic English proficiency, or limited exposure to information literacy skills. The database includes a table of 2004 census data showing the ten cities with the greatest gain in population. Students are asked to identify what trend they notice in the census regions where the cities are located. They determine that most cities with a gain in population are located in the West. Then they contrast this data with a list of the ten cities with the greatest *loss* of population. Again the academic discourse is elicited and students note that most of these cities are in the Northeast. Experience with this library database, prepares students to more effectively handle data from other sources including the U.S. Census Bureau.

During the second library workshop, we introduce discreet information from the U.S. Census Bureau and other sources of statistical information. *MapStats: United States* at www.fedstats.gov provides data such as population diversity, educational attainment, major employment sectors and crime rate. Cash-McConnell scaffolds the academic discourse, critical thinking strategies and evaluation of information resources. Typical data categories that are analyzed include: age and ethnic groups; industries and occupations for women/men; educational

attainment; commuting time to work; and environmental concerns. Throughout the project, Cash-McConnell coaches students in usage of such terms as *classify, hypothesize, predict,* and *create* to frame the tasks.

Soon the students are ready to research data for the individual cities they have selected for their final project. They consider issues such as:

1. What kind of educational attainment did the population of your city experience between the most recent census periods?

2. Interpret what this shift means for the preparedness of some members of this city's population to enter low skilled jobs, and others to enter professional positions.

3. Summarize how the preparedness of this city's population for the low skilled and professional labor force is similar or different from those cities that your peers are researching.

Classmates work together to sort through information, prioritize key points, and make connections in their research. At each step, Cash-McConnell encourages dialogue and scaffolds discourse with open-ended questions, seeking students' elaboration of initial responses so that students learn that their premises are valued, yet challenged. Students also work independently through their process of reflection, inquiry, problem solving and performance of the tasks.

The structured research approach lends concrete meaning to the folly of the facile statement: "I'll use Google for my research." Students are often surprised to learn about the varying reliability of Googled sites and express amazement at the ease of using library databases to find reliable information. They particularly notice the lack of consistency with general internet sources when they access their cities' chamber of commerce sites.

During the third library class, we provide guidance in two areas. For the first task, students identify an issue of environmental concern for their selected city by using the library-recommended Web site *Scorecard: The Pollution Information Site* at www.scorecard.org. With Bealle's coaching, students evaluate the site by discussing such criteria as the authority and currency of the information. Students use the Web site to generate a list of the local industries which contribute to the area's pollution. When Cash-McConnell expands the critical thinking by asking students to identify the major businesses at the top of the watchdog list, students realize that big business employers of their cities, such as marinas and utility companies, may be the major contributors to a city's pollution. This is an "Aha!" moment as they reflect and predict an ethical challenge for any city's growth.

For the second task, we provide instruction and workshop time to discuss academic integrity and how to cite sources in MLA style. Students learn how to prepare bibliographic citations for the final slide of their presentation.

The searching and evaluating process requires learners to apply critical thinking strategies in order to select appropriate information and determine how to incorporate it into their projects. The scaffolded dialogues that Cash-McConnell fosters in the classroom help them reconsider some of their premises for why population shifts have occurred in their selected cities, and what those shifts mean for city infrastructure. Critical reflection is paramount in each step of the information competency and classroom process. (Bealle and Cash-McConnell discuss further details of the collaboration in a chapter of the forthcoming book: *Using Technology to Teach Information Literacy*).

Assessment

Rubrics are used throughout the semester to help each student understand how well he has met criteria such as: (1) usage of the targeted academic language; (2) discussion of the interpretations of the data, and (3) technological competency. When they present a cohesive slide presentation on their selected U.S. cities they demonstrate the ability to:

- Use quantitative terms to describe charts and graphs
- Evaluate and synthesize demographic data
- Analyze the population shift of a U.S. city
- Use targeted discourse in written interpretations of data
- Understand and use targeted strings of academic discourse in presentations and group discussions
- Use interactive technology

In addition to demonstrating their ability to apply information literacy skills by synthesizing data for their presentations, each student completes a written evaluation of a Web source during the fourth library class. Their statements demonstrate an understanding of applying evaluative criteria such as currency and the author's credibility to determine if the information was reliable and relevant enough to use in their research project. Information literacy competencies are also demonstrated in crucial outcomes including:

- the recognition that library databases are often more appropriate sources for college than Googled Web sites;
- the ability to cite sources in a consistent style and articulate the importance of documenting sources.

The extent to which students realize that the reference librarian is a valuable resource for their research needs is particularly gratifying to Cash-McConnell and the library faculty. On our small campus, the reference librarians are familiar with the demographics project and regularly field questions from the class members.

Conclusion

The pedagogical value of our process is evident by the extent to which students gain academic confidence. Through structured contact with library resources and library faculty, plus academic computing resources and professionals, students reach a comfort zone in the academic milieu. They develop an academic identity that enables them to confidently use technology, ask librarians for guidance, and speak in their own voice about demographic issues affecting the cities they researched. The beauty of this collaboration is the extent to which the meaningful assignment equips students with a skill set they can apply in subsequent learning tasks. Furthermore, because the demographic assignment is relevant to life in the 21st century, the process cultivates not only academic literacy but also life-long learning.

Discussion Questions

Engaging ESL students in academic discourse is vital to their academic success. Consider these questions as you determine how to infuse information literacy instruction into the ESL curriculum at your institution:

- What are characteristics of meaningful research topics that would engage ESL students in academic discourse?
- How can research activities be scaffolded to make them meaningful for ESL students?
- What are key factors for effective library collaborations with ESL faculty and students?
- When should library workshops be introduced into the ESL curriculum?
- How can library workshops address the different academic needs of ESL students in two year, four year, and graduate programs?
- Why might ESL faculty be reluctant to include library workshops? How could these factors be addressed?

References

Bealle, P., & Cash-McConnell, K. (2008). A constructivist approach to instructional technology and assessment in ESL course design. In T. P. Mackey & T. E. Jacobson (Eds.), *Using technology to teach information literacy*. New York: Neal-Schuman.

Cummins, J. (n.d.). BICS and CALP explained. Retrieved 24 April 2008 from *Jim Cummins' Second Language Learning and Literacy Development Web* (1999-2003): http://www.iteachilearn.com/cummins/bicscalp.html

Cummins, J. (n.d.). Putting language proficiency in its place: Responding to critiques of the conversational/ academic language distinction. Retrieved 24 April 2008 from *Jim Cummins' Second Language Learning and Literacy Development Web* (1999 - 2003): http://www.iteachilearn.com/cummins/converacademlangdisti.html

Grafstein, A. (2002). A discipline-based approach to information literacy. *Journal of Academic Librarianship, 28*(4), 197-204.

Kaufman, D. (2004). Constructivist issues in language learning and teaching. *Annual Review of Applied Linguistics, 24,* 303-319.

O'Malley, J. M., & Chamot, A.U. (1990). *Learning strategies in second language acquisition*. New York: Cambridge University Press.

Suffolk County Community College. (2007). *2007 Self-Study. Submitted to the Middle States Association of Colleges and Schools Commission on Higher Education.* Retrieved 24 April 2008 from http://www3.sunysuffolk.edu/MiddleStates/docs/SCCC_self_study.pdf

Woodard, B. S. (2003). Technology and the constructivist learning environment: Implications for teaching information literacy skills. *Research Strategies, 19*(3/4), 181-192.