

Running head: ANALYSIS OF CILP

Collaborative Information Literacy Project: An Analysis of the Process

Kristin Yiotis

Design and Implementation of Instructional Strategies for Information Professionals

LIBR 250.11 – Spring 2006

San Jose State University School of Library and Information Science

### Abstract

The researcher reflects on her experience collaborating with a Business Information Systems instructor at De Anza College on the CIS03 Term Project in which she played the role of librarian instructor who provides the information literacy component for the project. Areas discussed are: learning theories used, the pros and cons of the collaboration process, the SWOTs involved, what stakeholders needed to learn, and how to adapt the project to onsite or distance learning. The researcher decides that true collaboration was not possible and that at best the experience could be called cooperation.

### Collaborative Information Literacy Project: An Analysis of the Process

State University of New York, Brockport, instituted the Paper Trail assignment as a way of assessing a general education course, “Oral Communication and Information Literacy” that was co-taught by the Communication Department and the Library (Nutefall, 2004, p. 90). The Paper Trail assignment requires that “students reflect on their research process, describing what worked, what did not, and what they would change” (Nutefall, p. 93). This essay is the paper trail for the CILP assignment in LIBR 250. The researcher refers to herself as the librarian instructor.

### Educational Theory and Practice

Based on the nature of the assignment the CIS03 Term Project is clearly grounded in the constructivist theory of learning. Both the subject instructor and the librarian instructor feel that students learn best by doing rather than observing and that successful assignments allow students to use their prior knowledge and experience as frameworks for learning (Carvin, n.d., Constructivism basics, ¶ 1).

Learning experiences based on constructivist theory involve students in “realistic, authentic situations that include hands-on activities to engender problem solving” (Rowley, Miller, and Carlson, 1997, 5.0 Methods section, ¶1). Macklin (2003) also refers to constructivism as an approach to learning that engages students in problem-solving activities (p. 495). The teamwork and the oral presentations, required in the CIS03 Term Project, constitute real life scenarios both of which “utilize collaboration and peer criticism as way[s] of provoking students to reach new level[s] of understanding. ...[by] critiquing and re-evaluating their [prior knowledge] (Carvin, n.d., Constructivism basics, ¶ 1).

Assignments that mirror real life, that have students creating workable solutions to real life problems, promote successful learning (Macklin, 2003). Loertscher’s (2006) Think! Models

are designed for librarians and subject instructors to work together to develop projects that are grounded in constructivist theory and that incorporate information literacy competencies. The Think! Models enabled this librarian instructor to develop an information literacy project that is not “divorced from the content and context of the student’s academic work” (Kirk, 1999, p. 235).

Each of the three models we used demanded that students begin with what they already know about data processing and communications systems from real-life experiences at work, at home, or at school. Students were encouraged to use “raw data and primary sources along with manipulative, interactive, and physical materials [in terms of technology] ... to engage in dialogue, both with the teacher and with one another ... to ask questions of each other” (Brooks & Brooks, as cited in Carvin, n.d., *Constructivism basics*, ¶ 2).

The three options available in the Term Project required the use of three different Think! Models, which greatly complicated planning. Loertscher’s (2006) instructional design assumes that the entire class is working together as a group on one project. While this may be usual at the high school level, it is not unusual for college level projects to allow more latitude and independence to students. In the CIS03 class, three options were available for the Term Project: building a business application using an information technology, selecting an information technology that would improve an existing business application, and researching a critical issue in information technology. These three options would not collapse into one Think! Model.

The librarian instructor chose the constructivist theory because the goal of problem-based learning is to enable students to acquire a ‘toolbox’ filled with information literacy skills that they can use for the rest of their lives, skills that enable students to acquire knowledge of any kind and in any context (Cheney, as cited in Day, 2006, Problem-based learning section).

#### The Collaboration Process

“Collaboration is a complex process; ... collaboration consists of many phases and includes many emotions” (Gross and Kientz, 1999, ¶ 3). The design process being discussed here, which resulted in the CILP CIS03 Term Project, did not follow the purely collaborative model created by Loertscher (2006). The process was cooperative rather than collaborative (Gross and Kientz, ¶ 2).

Ideally, the librarian would participate at the creation and development stage of any course assignment. The library instructor would introduce the Think! Models as the basis of an assignment and then play a major role in creating content and in deciding how to teach the assignment. But the reality of this researcher’s experience was that the CIS instructor had already designed a Step-By-Step plan for the Term Project assignment, which I was able to adapt by incorporating information literacy requirements. Because the Think! Models contain their own step-by-step processes, to use them as Loertscher has intended would have required that I replace the existing Step-By-Step entirely with the Think! Models. In the current experience I did not do that and so did not fully use the Think! Models to their potential as the very basis of the assignment. I can report that the CILP I evaluated, “Ballet Literacy,” did that and through the process of evaluating this CILP, I perceived the full potential of the Think! Models.

In the current experience replacing the instructor’s Step-By-Step with Loertscher’s Think! Models would have felt like an act of co-optation rather than cooperation or collaboration, taking it out of the control of the classroom teacher, unless information literacy were mandated by the department or the university, much like computer literacy and writing across the curriculum have been. In this case, information literacy would have a mandate to be included in the course requirements, just as computer literacy is mandated to be included in CIS03.

The information literacy component adds a dimension to the current assignment that the

teacher has little knowledge of. To adopt this component would require investment of time and energy. Part-time, adjunct faculty at De Anza are compensated for the hours they spend in the classroom, with lecture classes receiving higher per hour compensation than laboratory classes, but not for hours spent planning their classes, preparing or correcting assignments, or for any additional hours spent outside the classroom, such as office hours or time spent helping students. The additional time spent collaborating with a librarian would not be paid time. In view of this reality, I suggest initiating collaboration with only with full time, permanent, tenured, faculty.

This researcher questions whether the CIS Term Project was a good choice for an added information literacy component. Because the original assignment required that students be evaluated not only on the content of their research but also on the technology they use to create, present, and display their research, adding the additional component of grading on information literacy is more than the instructor could realistically cope with. Grading students' research process, the quality of their library resources and Internet sources, the accuracy of their citations and references would require the subject instructor yielding some control over the assignment.

I found it frustrating that during my one conference discussing the CIS Term Project, the subject instructor decided to withdraw the 10 points out of 100 she had designated for "clearly written, with correct spelling, grammar and punctuation (mostly)" to increase the oral presentation points from 10 to 20. The instructor's focus on the oral presentation is clearly stated in a personal communication: "Please be aware that the actual presentations are an important part of the project. The thinking is that in business they will need to make presentations to whom they report directly to, to management, etc and thus should have some experience at selling their proposal to others" (M. Pape, March 16, 2006). Evidently she felt that the 10-12 minute presentation in which each team member speaks is more important than correct English spelling

and grammar in the six to eight page written report. In addition, though she required “ a list of references to WEB pages, magazine articles, books, individuals you interviewed, et cetera” (Printed Report, CIS03 class Web site), she allotted no points to this nor mentioned it at all in her grading rubric (Grading, CIS03 class Web site).

This diminished focus on the written product may have been based on the fact that many, probably over half, the students in her class, have a language other than English as their primary language, and that the content of the research, “effective use of the lifecycle steps to analyze and solve the [business] problem,” and the technology students’ employ to produce the presentation and the paper, were the true focus of the project, not correct written English (Printed Report, CIS03 class Web site).

I find it frustrating that the reality for faculty-librarian collaboration is that, except in small, private colleges with enrollments of less than 2,000, like Rollins College (Zhang, 2001) and Earlham College (Kirk, 1999), true collaboration is almost impossible. At SJSU King Library, for instance, the 27 full-time academic librarians are the information literacy liaisons for all academic departments. If each librarian had to collaborate with the faculty in the departments they represent, that would mean 27 librarians collaborating with 1,056 full-time, equivalent faculty or 845 full-time, tenured faculty (J. Schmidt, personal communication, May 9, 2006). Since this is obviously impossible, each department could designate certain courses as those in which the faculty and librarians work collaboratively to create assignments incorporating information literacy competencies, such as at SUNY, Brockport (Nutehall, 2004). The other option is to have stand-alone tutorials on the library’s Web site that are available to all classes and all students and one shot information literacy instruction sessions.

Curriculum and Accountability:

The literature provides models of information literacy instruction that assisted this researcher. Roldan and Wu's (2004) discussion of context-based library instruction provided information literacy guidelines, learning objectives, and a justification for context-based instruction. Their study found that "intensive interweaving of course content and library instruction is an effective means of improving students' information literacy" (Conclusions section). If trained in library resources, students will use library databases more; if trained in research techniques, students will express higher standards and expect more from themselves in terms of their research and writing. Roldan and Wu report a shift toward increased use of the recommended library databases and away from nonlibrary Web sites (Findings section).

Gross and Kientz (1999) provide a model for assessing the level of authenticity of library assignments using five variables: higher order thinking, depth of knowledge, connectedness to the world, promoting conversation, and providing social support (§ 9). Authentic learning comes from the belief that "library programs must be based around learning, not around libraries" (Gross & Kientz, § 5) because "information literacy is not about libraries or technology, it is about educating students" (Day, 2006, Abstract). This researcher feels that authentic, content-specific library instruction is not available at De Anza at present. When this researcher was an instructional assistant in the English Department, she asked her 70 plus students to complete a short survey about using library resources and receiving library instruction. Based on this anecdotal evidence, students who participate in Freshman Orientation receive a library orientation that consists of a tour of the library and a demonstration of the library's OPAC and databases. In addition, some students reported receiving library research instruction in connection with specific classes, mostly in the Humanities, such as English or ESL composition classes. Other students reported receiving no library orientation or instruction.

There are good reasons for the current lack of adequate instruction. The De Anza Fact Book shows in Fall 2005 De Anza enrolled 23,255 students served by five full-time librarians and nine non-professional library staff (Staff directories, 2005). Due to budget cuts part-time, adjunct librarians have been let go. When librarians go on sabbatical, they are replaced by staff and student workers who may not have BA degrees. For example, when the library's cataloger, a graduate of SLIS, SJSU, spent 2005-6 on sabbatical, her student assistant, with the qualification of the Foothill College Library Technology program but no BA degree, took over her position.

### Information Literacy: The SWOTs

#### *Strengths*

The CILP includes four information literacy standards each supported by performance indicators describing how the standard would be met and measurable outcomes explaining how performance would be measured. The measurable outcomes are concrete behaviors that students must perform, which lead to the skills or competencies that are designated as the Term Project learning objectives. The bibliographic instruction (BI) components that were developed for the CILP are based on the learning objectives. So the syndectic structure is hierarchical moving from the general to the specific, from the information literacy standards to the BI components.

Take, for example, "Standard three—the information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system" (American Library Association (ALA), 2005). The performance indicator is "the information literate student articulates and applies initial criteria for evaluating both the information and its sources" (ALA). One measurable outcome is that students evaluate Web resources according to a set of standards. The related learning objective is that students successfully demonstrate research skills involving locating appropriate sources on a

topic using library resources, databases, and the World Wide Web (WWW). The BI instruction supporting the learning objective is a lesson on how to judge the quality and reliability of information found on the Web.

### *Weaknesses*

The subject area expert was not aware of information literacy concepts. The additional information literacy components greatly altered the Term Project, particularly the Think! Models. These are broad based, holistic, models for coordinating and developing projects; they do not easily “fit in” to preexisting projects. They are designed to be models from which you develop an entire project—from start to finish—that are built around a seamless mesh of information literacy and content area skills. So it is best if the instructional librarian and the subject expert instructor start with a model at the beginning and work forward with the project.

The librarian instructor was not aware of business information systems concepts. Concepts presented in the original CIS03 Term Project were outside the scope of this librarian instructor. Based on the limited amount of time in which to collaborate and the limited availability of the subject instructor, this librarian chose to omit reference to, and any evaluation of, complex concepts relating to data processing and communications systems, such as “Effective use of the lifecycle steps to analyze and solve the problem” (CIS03 term project, 2005), even though the subject instructor had awarded 10 points to this concept on the original rubric. Future collaboration would require working through the CILP if the original concepts introduced by the subject instructor were not being supported.

### *Opportunities*

In conference with the instructor, the librarian instructor presented ideas for developing information literacy tools for her class. We discussed information literacy skills that students

needed to successfully complete a class project. Choosing this field enabled me to develop my knowledge base. The fact that academic librarians must be librarian instructors in fields they have little prior knowledge is supported by conversations with King librarian P. Cabrera, liaison for such disparate departments as Computer Science, English, Global Studies, Kinesiology, and Metropolitan University Scholars Experience (MUSE) (SJSU subject specialist contacts, 2006).

### *Threats*

The CILP makes no plans for scheduling face-to-face instructional meetings with the class in which to teach, practice, and explore the BI tools that are provided, nor is time designated for training the subject instructor. Plans for how the BI component would actually take place in real time during a 12-week quarter must be discussed before the CILP can be implemented. At this point the librarian instructor has submitted the CILP to the subject instructor and is waiting for a response. The subject instructor is an MBA student, who is also writing papers and taking exams. The threat is that the CILP will simply be ignored, made little use of, or rejected as incomplete, or too time consuming to implement, even partially. On a positive note, in examining the Spring CIS03 Term Project, I see that the subject instructor has made use of a small portion of the CILP, and she may use more as handouts.

### Adaptability: Onsite or Distance Learning?

The CILP has two distinct parts, the subject instructor and librarian instructor's portion and the CIS03 Term Project portion, which should be made available to all students. The CIS03 Term Project portion is designed to be used in two ways: to be printed out by all students, so it can be read carefully and used as a resource and reference by the project teams; and to be made continuously available at the class' Web site or at any computer with Internet access, so that the bibliographic instructional hyperlinks are active.

Because the CIS03 Term Project portion of the CILP is distributed over the De Anza Web server at the class' site, it is easily adapted to distance learning-only classes, though the current class is face-to-face. The bibliographic instructional component can be used in several ways, as a tutorial, as the basis for onsite instruction, as a reference for post-onsite instruction.

As mentioned above, this researcher did not attempt to fit the CLIP into the CIS03 class schedule for Winter or Spring 2006 quarters. The collaboration between subject instructor and librarian instructor was too brief to plot out where in the quarter the CLIP would best fit or exactly when and how onsite instruction, or even distance instruction, would take place. As mentioned earlier the threat exists that the CILP does not fit into the class schedule at all without removing major portions of the CILP or the current class content. This researcher feels conflicted about replacing any subject content with information literacy content without having a mandate to do so at the departmental or university-wide level.

True collaboration on the project would bring a balance between subject area instruction and information literacy instruction. Mackey and Jacobson (2005) discuss subject instructors' awareness of the need to determine what course material might be replaced by the new information literacy component as part of the collaboration process (p. 143). Gross and Kientz (1999) discuss helping subject area instructors "understand and realize the benefits of their investment in partnering [with librarians]," a process that can take from two to five years according to Haycock (as cited in Gross & Kientz, ¶ 3).

## References

- American Library Association. (2005). *Information literacy competency standards for higher education*. Retrieved March 17, 2006, from <http://www.ala.org/acrl/ilcomstan.html>
- Browse instructor distribution files on PUMA*. (n.d.) Retrieved May 8, 2006, from the De Anza College server site: <http://puma.atc.fhda.edu/distribute/PAPE/CIS3/>.
- CIS03 term project*. (2005). Retrieved May 8, 2006, from the De Anza College server site: <http://puma.atc.fhda.edu/distribute/Pape/CIS3/Term%20Project/>
- Carvin, A. (n.d.). Constructivism basics. *EdWeb: Exploring technology and school reform*. Retrieved May 9, 2006, from <http://www.edwebproject.org/constructivism.basics.html>
- Carvin, A. (n.d.). Constructivism. *EdWeb: Exploring technology and school reform*. Retrieved May 9, 2006, from <http://www.edwebproject.org/constructivism.html>
- Day, E. (2006). *A crash course in bibliographic instruction: A guide through the literature of learning how to teach how to learn*. Unpublished manuscript, San Jose State University.
- FactBook Demographic Fact Sheets: Fiscal years 1996-2005 De Anza*. (2005). Retrieved February 9, 2006, from Foothill-De Anza Community College District Web site: [http://research.fhda.edu/factbook/DAdemofs/demographic\\_fact\\_sheets\\_da.htm](http://research.fhda.edu/factbook/DAdemofs/demographic_fact_sheets_da.htm) . Also available at: <http://research.fhda.edu/factbook/factbook.htm>.
- Gross, J., & Kientz, S. (1999). Developing information literacy: Collaborating for authentic learning. *Teacher Librarian*, 27(1), 21-25. Retrieved March 28, 2006, from Academic Search Premier database.
- Loertscher, D. V. (2006). *Super teaching: 15 think! models for improving instruction in college courses, outline courses, and professional development*. Castle Rock, CO: Hi Willow Research & Publishing.

- Mackey, T. P., & Jacobson, T. E. (2005). Information literacy: A collaborative endeavor. *College Teaching*, 53(4), 140-4. Retrieved April 10, 2006, from Academic Search Premier database.
- Macklin, A. S., (2003). Theory into practice: Applying David Jonassen's work in instructional design to instruction programs in academic libraries. *College and Research Libraries*, 64(6), 494-500. Retrieved January 29, 2006, from <http://www.ala.org/ala/acrl/acrlpubs/crljournal/backissues2003b/nov03/macklin.pdf>
- Roldan, M., & Wu Y. D. (2004). Building context-based library instruction. *Journal of Education for Business*, 79(6), 323-27. Retrieved February 1, 2006, from Academic Search Premier database.
- Rowley, K., Miller, T., & Carlson, P. (1997, March). *The influence of learner control and instructional styles on student writing in a supportive environment*. Paper presented at the meeting of the AERA, Division C, Chicago, IL. Retrieved February 1, 2006, from [http://www.isrd.com/publications/conferences/AERA97/rwise\\_tp.htm - Toc379188357](http://www.isrd.com/publications/conferences/AERA97/rwise_tp.htm - Toc379188357)
- SJSU subject specialist contacts*. (2005). Retrieved May 8, 2006, from the SJSU King Library Web site: [http://130.65.109.14/about/contacts/sjsu\\_specialists.htm](http://130.65.109.14/about/contacts/sjsu_specialists.htm)
- Staff directories*. (2005). Retrieved March 20, 2005, from the De Anza College Web site: <http://www.deanza.edu/directory/dir-phone-staff.html>.
- Wiburg, K. M. (2003). *An historical perspective on instructional design: Is it time to exchange Skinner's teaching machine for Dewey's toolbox?* Berkeley, CA: Internet Time Group. Retrieved February 1, 2006, from <http://www.internettime.com/itimegroup/Is%20it%20Time%20to%20Exchange%20Skinner's%20Teaching%20Machine%20for%20Dewey's.htm>