

FIRST-YEAR COMPOSITION AND THE WRITING-RESEARCH GAP

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Last spring, a group of composition teachers (one of whom is also an academic librarian) discussed our frustrations with student research and came to a hard realization: although we expected our students to arrive in our classes ready to undertake the research projects we designed and assigned, our students were not meeting the challenge, and we were not providing them with the tools they needed for success. Although compositionists are trained to understand the writing differences between expert and novice writers (Carey, et al, 1989; Faigley & Witte, 1981; Sloan, 1990), they are unfamiliar with the well-documented differences between expert and novice researchers (Burton & Chadwick, 2000; Leckie, 1996; Mittremeyer, 2005).

Even as we complained about our students' inability to plan and carry out engaged research, we also realized that we were expecting, rather than explicitly teaching, the competencies that would enable our students' success. The non-librarians among us did not even know there was a disciplinary term for the kinds of life-long learning strategies we wanted our students to embrace: information literacy. This paper, then, is the story of educators concerned about a common problem; exploring whether other teachers of first-year students shared our concerns; and searching for a solution that would allow us to collaborate with our librarian colleagues.

INTRODUCTION AND LITERATURE

The intersection between work done by writing teachers and academic librarians should surprise no one, as it has been noted by researchers in both fields (Fister, 1992; Rohan, 2002; Elmborg, 2003). Both fields promote undergraduate education through teaching reading, critical thinking, and the effective and ethical

use of information. As a result, librarians and compositionists share a number of closely aligned challenges. For example, many students actually fear libraries and experience anxiety when assigned projects that require library work (Onwuegbuzi, Jiao & Bostic, 2004). Similarly, composition researchers have studied writing apprehension in the first-year classroom (McCarthy, Meier, & Rinderer, 1985; McAndrew, 1986; McLeod, 1987), graduate dissertation writing (Bloom 1985), and the workplace (Aldrich 1982).

At the other end of this spectrum are students who come to higher education with more self-confidence. These undergraduates assume that they already know how to write well, or well enough, and dislike being required to take a first-year writing class. Not surprisingly, many students also claim similar library expertise and regularly resist even the occasional opportunity for library instruction, although most have little experience in a research library and few, when tested, demonstrate competency with specific research tasks (Mittermeyer, 2005).

Both compositionists and librarians have endured comments from colleagues outside of their disciplines about students' inability to write well or employ resources beyond poor-quality Internet sources in their work. Yet, despite these and other disciplinary intersections, collaborations between writing teachers and librarians have only occasionally been formally studied. This lack of partnership may also illustrate why the processes of research and writing have not been consistently taught together. English teachers often assign research and teach writing, expecting librarians to teach complex library skills without a specific research context, typically in one session, at the reference desk, or not at all.

Beyond individual institutional examples, this disconnect between academic librarians and compositionists is further illustrated by the lack of professional interaction on the national level. For example, in 2001, the Association of College and Research Libraries (ACRL) held *Crossing the Divide*, its 10th annual convention, in Denver, Colorado. The very same

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week, the 52nd Annual Conference on College Composition and Communication (CCCC), *Composing Community*, was also being held in downtown Denver. In spite of the conference titles promoting *Composing Community* and *Crossing the Divide*, there was little evidence of community building between these two groups. A study of the programs from both conferences show that planners from both professional organizations failed to recognize a potentially important opportunity for collaboration, as there was no session at either conference that actually crossed the divide into the other disciplinary community (NCTE, 2001; Thompson, 2001).

Although there have been calls for collaboration between these disciplines at the professional level, they almost exclusively appear in the literature of library and information sciences (Fister, 1992; McMillen & Hill, 2004; Norgaard, 2004) and therefore rarely reach compositionists. While our project is not the first to call for more collaborative work, it is the first to offer writing teachers quantitative data concerning the connections among how compositionists teach research, perceive students' information literacy skills, and evaluate classroom engagement. Ultimately, we hope to suggest ways for writing instructors and academic librarians to negotiate their shared responsibilities for teaching first-year students how to do research in an information-overloaded world, and to suggest why such a dialog might matter.

METHODS

In this study, we adapted Annmarie B. Singh's survey from "A Report on Faculty Perceptions of Students' Information Literacy Competencies in Journalism and Mass Communications Programs: The ACEJMC" (2005) which examines journalism and mass communication professors' evaluation of their students' levels of information literacy. Although Singh's study provides a good model for collecting data about teachers' perceptions of student skills, Singh does not ask faculty *how* they teach library literacy. In fact, her study only asks whether faculty assign research.

However, because, according to Davis and Shadel (2000), approximately 84% of writing teachers "teach" the research paper, these teachers necessarily have a different relationship with information literacy. Like other faculty, teachers of writing may share the faulty assumption that students basically already know how to use a library. However, the researchers involved in this project believed that most teachers of first-year writing do employ a variety of strategies that closely relate to information literacy. In fact, we hypothesized that:

- the more, and more varied, strategies that first-year writing teachers employ to teach information literacy, the more adequate they find their students' skills.
- although a variety of studies suggest that certain individual strategies are not very effective in teaching information literacy skills (the library tour, for example), those studies have not previously

considered the effects that a variety of classroom practices might offer.

- a relationship exists between the perception faculty members have of information literacy levels and their perception of student engagement.

To test these hypotheses, we secured Singh's permission to extend her research by redesigning and directing the survey to English teachers and asking them not only about their students' information literacy skills, but also about the kinds of activities and assignments they used to teach those skills.

SURVEY INSTRUMENT

We developed a survey measuring seventy items, primarily using a modified Likert scale. There were many benefits to using Singh's survey; it had been thoroughly tested on over 400 users and had rated "adequate" to "high" for internal consistency (Singh, 2005). Although we designed our survey to build upon Singh's, we were particularly interested in the relationship between writing teachers' reports of their students' information literacy skills and whether/or how those teachers were teaching information literacy. To help us understand this relationship, we asked writing teachers from three local institutions to note the activities they used to teach information literacy in their classrooms. We did this by describing a range of assignments and activities and asking respondents to choose from 11 possible answers or to provide their own open response, for a total of 12 options.

We invited all of the 105 English faculty who were teaching at three area colleges and universities to take our survey. These institutions were varied in focus and make-up as well as total number of teaching faculty: One is a doctoral-granting public land grant institution (n=51), another is a master's-granting comprehensive public institution (n=35), and the last is a 4-year private liberal arts college (n=19). The 105 invited participants ranged from first-time teaching assistants to tenured professors. From the 105 participants invited to respond, we collected 49 usable surveys, representing a return rate of almost 47%.

ENGLISH TEACHERS TEACHING INFORMATION LITERACY SKILLS

In order to understand the relationship between how first-year writing teachers teach information literacy and how they report the effectiveness of their students' skills, we asked teachers about the kinds of assignments and activities they use to introduce information literacy. We provided a list of activities (Table 1), and asked respondents to check each activity they had used in their classrooms. Although the only strategy employed by 100% of our respondents was to assign a research paper or project, 42% employed more than six different strategies to support the research skills needed for that project, and only 2 people (4%) assigned research papers with no classroom apparatus for supporting that assignment.

Because we hoped to understand the relationship between what an instructor teaches and how that teacher reports his or her students' information literacy skills, we reported these data in one additional way: we counted the variety of ways each respondent taught information literacy skills. All respondents employed between one and ten strategies to introduce information literacy. Table 2 shows how many respondents used each individual strategy. Of twelve possibilities, the mode for this question was 5, with ten respondents saying that they had used five different activities and assignments to teach research skills. The mean was 6.4. We were then able to divide the responses between those teachers who employed more strategies than average (seven and above), and those who employed fewer strategies than average. We discovered a clear relationship: those teachers who employed a wider variety of strategies to teach information literacy skills rated their students' skills higher in every skill category (Table 3). Table 4 provides the data for questions concerning teacher evaluation of first-year students' information literacy skills, attitudes, and behaviors.

DISCUSSING RESEARCH QUESTIONS

Question One: Although it does not seem particularly insightful to suggest that teachers who do more to teach information literacy evaluate their students' skills as significantly stronger, related research suggests that teachers who clearly articulate their research expectations are more likely to have students meet those expectations (Davis, 2003; Tomaiuolo, 2005). Likewise, we discovered that teachers who employed more than the average of 6.4 different strategies to teach information literacy skills found more of their students to be information literate (2.9 to 2.44); categorized their research skills as more satisfactory (2.52 to 2.2); found them more able to conceptualize and form research questions (2.85 to 2.64) and understand the research process (2.67 to 2.2); and to use print (2.57 to 2.39), database (2.76 to 2.50) and Internet resources (3.0 to 2.54) more successfully. Moreover, they felt that their students were far more able to consistently cite sources than did those teachers who used fewer than average strategies to teach information literacy (3.13 to 2.25). These results suggest that teachers doing the most to teach these competencies in their classes understand two important issues: 1) students do not learn complex rhetorical skills in one time and place, but instead acquire these skills through practice with specific but varied contexts; and 2) research strategies are not transparent skills that students should have "picked up" previously or will figure out on their own.

Question Two: Though it may seem an obvious conclusion based on what we know about learning, our survey showed a strong connection between faculty who identified themselves as using more than six methods to teach information literacy and their overall satisfaction with students' information literacy. It seems that the more library guidance a first-year writing teacher reported providing, the more likely that faculty member was to report higher information literacy competency amongst his/her students. Similarly, Kathleen Dunn's research (2002) found a relationship between student research performance and amount of library use-- simply using the library more frequently improved students' skills. Dunn's research supports our work by suggesting that certain *combinations* of activities improve skill-levels over time, even if there is little compelling evidence that specific

strategies employed in isolation—such as the library tour, the one-shot library training session, or the ever-popular (and despised by librarians) scavenger hunt—are successful. By utilizing more than one technique in a course for introducing information literacy strategies, these faculty allowed their students to build on or correct prior research experiences, which likely contributed to student ability and faculty satisfaction as well.

Question Three: Though it is challenging to isolate information literacy as a single variable in a classroom setting, there seems to be a relationship between the perception faculty members have of student information literacy levels and student engagement. This study noted that those faculty who evaluated "most" of their students as information literate reported higher levels of student engagement in class than those who reported that "few" of their students were information literate (Table 5). Any number of external variables could contribute to this connection. However, it seems intuitive that those students who don't experience the process of learning to undertake research as overwhelming, unproductive drudgery might be more likely to approach a course requiring research at least somewhat more enthusiastically. Informed students, and students able to inform themselves, have something to say, not only in our classrooms, but in our communities.

CONCLUSIONS

Since 83% of our respondents employed five or more discreet activities and assignments to introduce information literacy, our study clearly suggests that the first-year writing teachers in our sample cared about information literacy. Moreover, respondents consistently suggested that few of their students have had enough library experience. Therefore, we do not think it should be difficult to convince compositionists that information literacy matters to them; their responses demonstrate that it already does. What our study found is that teachers who develop more and varied research-related activities find their students to be more competent and engaged, even if those same activities, employed in isolation, may not be particularly effective. These findings have many implications for both compositionists and academic librarians, but we want to conclude by focusing on the implications for collaboration that seem supported by our findings. If our goal is to produce diverse, structured activities that support research as part of a recursive, rhetorically situated writing process, compositionists and librarians need to begin the conversations that will make collaborations possible. Here are some strategies we are implementing at our institutions:

- Assure opportunities for communication and conversation: ask for representation on writing program committees and invite writing program administrators to be represented in library orientation or instruction program advisory boards; invite writing teachers to professional development opportunities surrounding research and writing, or create specific opportunities for invitations--they will reciprocate.
- Visit each other's classes to develop a shared vocabulary and understanding of teaching strategies. Collaborators often need a shared vocabulary and understanding of differences before they can move forward to success.

- Share assignments, ideas, and activities. Employ web spaces or learning management software to share best practices developed through library/faculty collaborations.
- Design collaborative classroom or program research opportunities for small teams. Not only will good data be collected for assessing innovative programs, but the goal of publishing in the journals of one another's disciplines allows information to be disseminated more widely, and for the sharing of best-practice information that could drive collaborations at other institutions.
- Collaboratively work toward a vertically integrated writing/research curriculum. If we believe, as Ilene F. Rockman (2004) tells us, that in order to learn the rhetorically complex set of research abilities called information literacy, students need repeated opportunities to undertake research throughout their college careers, we need to introduce these skills in the first year and develop writing programs that reinforce them vertically through the curriculum.

Information literacy is that set of skills that compositionists and librarians can work together to teach in order to help students understand that invention and inquiry are mutually informing activities, and that the writing process does not begin where the research process ends. For their part, compositionists need to extend the rich and varied work presently taking place in the field of library and research science to develop strategies for embedding the research process into our most sophisticated understanding of writing as a rhetorical process. As our study suggests, teachers of first-year writing at a variety of institution types and sizes are already doing this thing that they had no name for. Academic librarians can aid their compositionist colleagues by helping them name this important set of competencies and collaborating to develop teaching strategies that will structure research processes. Norgaard asserts that this kind of interaction can only benefit both disciplines: "Both rhetoric and composition and library reference and instruction would become more robust if each would more fully understand and integrate the work of the other in its theoretical self-understanding and pedagogical practice. The stakes are too high not to welcome each other as genuine and natural intellectual partners in a common rhetorical enterprise" (2004).

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Table 1: Number responding to each category

Question 5: I teach my students information literacy skills in the following ways:

| | | | | | | | | | | | |
|--|---|----|----|----|----|----|----|----|----|----|----|
| Requiring a research paper or project | | | | | | | | | | | 49 |
| Using a laddered (or stepped) approach to demonstrate that research is a process | | | | | | | | | | 36 | |
| Designing in-class activities and assignments to support major assignment through practice | | | | | | | | | | 38 | |
| Spending class time to explain appropriate documentation style and source use | | | | | | | | | | | 46 |
| Touring the library with my students | | | | | | 25 | | | | | |
| Showing students how to use, access, or cite specific resources | | | | | | | | | | 35 | |
| Discussing with students appropriate criteria you use for evaluating sources | | | | | | | | | | | 47 |
| Requiring students to complete one or more on-line tutorials | | 8 | | | | | | | | | |
| Asking library staff to provide an instructional session | | | | | | | | | | 27 | |
| Allowing a librarian to contribute assignment/activity development | 2 | | | | | | | | | | |
| Other (Scavenger hunts) | 2 | | | | | | | | | | |
| Other (annotated bibliographies or other invention focused research) | 2 | | | | | | | | | | |
| | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | |

Table 2: Responses to questions based upon respondents who employ more than six and six or fewer strategies for teaching information literacy skills

| Question | Total mean For question | Respondents claiming more than 6 approaches to teaching IL (#5) | Respondents claiming fewer than 6 approaches to teaching IL (#5) |
|--|-------------------------|---|--|
| Question #9: Given the information literacy standards defined before question #5, I would say that my first-year students are information literate. 2=Few; 3=Some | 2.70 | 2.90 | 2.44 |
| Question #12: I would categorize the research skills of my first year students as: 1=Poor; 2=Adequate | 2.42 | 2.52 | 2.2 |
| Question #15 : My first-year students are able to conceptualize and formulate good research questions. 2=Some; 3=Most | 2.73 | 2.85 | 2.64 |
| Question #42: My first-year students understand that research is a non-linear process and approach it as such. 2=Some; 3=Most | 2.57 | 2.67 | 2.2 |
| Question #48: My first-year students know how to find high-quality information using traditional print library resources. 2=Some; 3=Most | 2.59 | 2.57 | 2.39 |
| Question #51: My first-year students know how to evaluate and select high quality information from library subscription databases. 2=Some; 3=Most | 2.65 | 2.76 | 2.50 |
| Question #54: My first-year students know how to evaluate and select high quality information from the Internet. 2=Some; 3=Most | 2.63 | 3.00 | 2.54 |
| Question #60: My first-year students consistently cite materials using an appropriate citation style. 2=Some; 3=Most | 2.89 | 3.13 | 2.25 |

This table suggests that the more strategies a teacher uses in class for teaching information literacy, the more effective that teacher rates his/her students' information literacy skills. Teachers who use more than six different activities to teach information literacy skills rated their students' skills higher in every area.

Table 3: Teacher's perception of student's information literacy in relation to the number of ways in which the teacher teaches information literacy skills (question #5)

| Question # | #9 | #12 | #15 | #42 | #48 | #51 | #54 | #60 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total | 124 | 64 | 123 | 113 | 114 | 122 | 121 | 133 |
| Mean | 2.70 | 1.42 | 2.73 | 2.57 | 2.59 | 2.65 | 2.63 | 2.89 |
| STD | .73 | .54 | .85 | .73 | .76 | .79 | .57 | .88 |
| Mean (teachers using more than 6 strategies to teach IL skills) | 2.90 | 1.52 | 2.85 | 2.67 | 2.57 | 2.76 | 3.00 | 3.13 |
| Mean (6 or fewer strategies to teach IL skills) | 2.44 | 1.20 | 2.64 | 2.20 | 2.39 | 2.50 | 2.54 | 2.25 |

This table provides the same information as above, but offers the total and standard deviation for each question.

Table 4: Faculty Evaluation of Students' Information Literacy
Student Research Skills and Practices: First Year (N=49)

| | | | | | | | | | |
|--|---------|------------------|---------------|-----------------|-------------|---------------|------|------|-----|
| 9. Given the information literacy standards defined before question #5, I would say that my first-year students are information literate. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 48 | 0 | 8 | 19 | 21 | 0 | Few | 2.73 | .74 |
| 12. I would categorize the research skills of my first-year students as: | | | | | | | | | |
| | Valid N | Excellent (5) | Strong (4) | Adequate (3) | Poor (2) | Absent (1) | Mode | Mean | STD |
| 1 st Year | 47 | 0 | 1 | 19 | 27 | 0 | Poor | 2.45 | .54 |
| 15. My first-year students are able to conceptualize and formulate good research questions. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 47 | 0 | 7 | 21 | 19 | 0 | Some | 2.74 | .71 |
| 18. My first-year students display time management skills by meeting course requirements within deadlines. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 47 | 0 | 30 | 13 | 4 | 0 | Most | 3.55 | .65 |
| 21. My first-year students display sound critical thinking skills. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 47 | 0 | 4 | 28 | 15 | 0 | Some | 2.77 | .60 |
| 24. My first-year students apply analysis and original thought to existing information to create new information. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 48 | 0 | 3 | 16 | 27 | 2 | Few | 2.42 | .68 |
| 27. My first-year students are comfortable using computer technology for information gathering and data manipulation. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 47 | 8 | 31 | 7 | 1 | 0 | Most | 3.98 | .64 |
| 30. My first-year students understand how information is produced, organized and disseminated. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 48 | 1 | 4 | 17 | 24 | 2 | Few | 2.54 | .80 |
| 33. My first-year students understand how information is organized into disciplines and subject fields. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 46 | 0 | 7 | 21 | 16 | 2 | Some | 2.70 | .76 |
| 36. My first-year students understand how professionals working in their area of study use information. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 48 | 0 | 4 | 20 | 19 | 5 | Some | 2.48 | .80 |
| 39. My first-year students confer with teachers in their field to identify information resources and processes used in the field. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 44 | 0 | 4 | 11 | 25 | 4 | Few | 2.33 | .79 |
| 42. My first-year students understand that research is a non-linear process and approach it as such. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 46 | 0 | 3 | 23 | 17 | 3 | Some | 2.57 | .72 |
| 45. My first-year students know that critical theories and research methodologies vary and apply the appropriate theory or method appropriate to the task. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 47 | 0 | 2 | 12 | 19 | 14 | Few | 2.04 | .85 |
| 48. My first-year students know how to find high-quality information using traditional print library resources. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 46 | 0 | 6 | 19 | 19 | 2 | ? | 2.59 | .76 |

Table 4, Continued

| 51. My first-year students know how to evaluate and select high quality information from library subscription databases. | | | | | | | | | |
|--|---------|------------|-------------|-------------|------------|-------------|------|------|-----|
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 48 | 0 | 8 | 18 | 20 | 2 | Few | 2.67 | .81 |
| 54. My first-year students know how to evaluate and select high quality information from the Internet. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 48 | 0 | 3 | 25 | 20 | 0 | Some | 2.65 | .60 |
| 57. My first-year students can discriminate between scholarly and non-scholarly information resources. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 48 | 1 | 8 | 20 | 15 | 4 | Some | 2.73 | .92 |
| 60. My first-year students consistently cite materials using an appropriate citation style. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 48 | 0 | 16 | 14 | 17 | 1 | Few | 2.94 | .89 |
| 63. My first-year students are actively, intellectually engaged in class and their participation drives the discourse. | | | | | | | | | |
| | Valid N | All (5) | Most (4) | Some (3) | Few (2) | None (1) | Mode | Mean | STD |
| 1 st Year | 48 | 0 | 10 | 23 | 14 | 1 | Some | 2.88 | .76 |

Table 5: The relationship between information literacy and student engagement

| | |
|------------------------------|-------------|
| | #63 |
| Total | 132 |
| Mean | 2.87 |
| STD | .75 |
| Mean for “most” on #9 | 3.14 |
| Mean for “few” on #9 | 2.62 |

Teachers who report that “most” of their students are information literate (#9) also report that students are more actively engaged in class (#63) than those who report “few” of their students are information literate.