Creating a Reading-Across-the-Curriculum Climate on Campus

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In response to a sense on campus that students were not as engaged with their reading as they could be, we asked: "What gets in students' way when it comes to reading?" and "What can professors do to make our students' experience with reading better?

When it comes to reading, there are common problems professors face and there are content-specific issues—both are important aspects of reading-across-the-curriculum. As the conduit for learning, reading is often taken for granted—seen as simply a medium. In this chapter, we will share how we began to build a "reading-across-the-curriculum" climate on our campus. We share what work we, two literacy professors, one science education professor and one biology professor, were doing to advance our goals individually and how we joined forces to produce a more concerted effort. We started by doing research about student reading habits in the discipline of science and by conducting outreach about reading to professors across campus in different disciplines. Our work was grounded in both college-level reading literature and discipline-specific literature. We found through our outreach that other professors on our campus were sincerely concerned about student reading and wanted to know what they could do to help.

If you are a professor who is open to having a frank conversation with college students about their academic reading habits, you may have (as we have) experienced responses such as these: "My professor doesn't expect me to read—she just wants us to know the power points." Or, "I don't buy the book for the course—my professor doesn't cover much of the book." Such comments got us thinking: "What are we communicating to our students directly or indirectly about reading?" In addition, we have been aware for some time that many of our students, both developmental students and students in non-remedial classes, were struggling with the reading they *did* do for classes. Finally, we wondered what other professors on campus thought—what were their experiences with student reading? What kind of reading climate did they think we have on campus? As the conduit for learning, reading seemed like it was often taken for granted—seen as simply a medium and not given the attention it deserved.

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We—two literacy educators, one science educator and one biology professor—began discussing our concerns about student reading informally at a Center for Teaching and Learning professional development workshop at our university and decided to form a faculty learning community,[1] which would follow up on our concerns.

Our concerns centered around the lack of support services in the area of reading and the lack of acknowledgment of reading issues on campus. At our university, students request tutoring based on the class they are having trouble with, and there are not any "reading tutors" who are reading specialists. So, for example, a student will sign up for tutoring for Biology and will get a peer tutor who got an A in the class. That student presumably has a good grasp of the content and is probably a good reader, but does not have extensive training in how to support students with reading difficulties. We do have a writing center, but no place where students can get help with reading for classes. In general, there was a lack of attention given to reading as a topic on campus and little data available to us that might help us make our case. We realized that we needed to gather some evidence and spread the word, as well as find other people on campus who might already share our worries.

We decided to begin our work by conducting our own research to gather some data to help us communicate our concerns. Our overarching questions were "What common issues/problems do we as professors face with student reading?" and "What content-specific issues/problems do we as professors face with student reading?" These questions led us to wonder more specifically about our students' experiences with reading, and we asked the following additional questions: "What gets in students' way when it comes to reading?" and "What can we do to make our students' experience with reading better?"

These questions reflect our definition of academic reading at the college level, which highlights, among other things, the active role of students in their reading. College reading has a "constructivist emphasis on human agency" (Spivey, 1997, p. 86), asking students to make connections and actively interact with texts. We conceptualize college reading as a critical process, which students actively engage in as they make sense of complex texts using intertextuality. Texts always exist in relation to other texts and the overlapping nature of the disciplines of college make for a heightened sense of "intertextuality." As Armstrong & Newman (2011) point out, "It is challenging, indeed, to think of a single academic discipline that does not involve intertextual materials and cross-textual synthesis on some level" (p. 2). We align our view of college reading with Horning's 2012 definition, which highlights the complexity and multi-media aspects of literacy:

> Academic critical literacy is best defined as the psycholinguistic

1 Faculty learning communities have been established on many college campuses to formally integrate professors across disciplines and support collaborative research.

> processes of getting meaning from or putting meaning into print and/or sound, images, and movement, on a page or screen, used for the purposes of analysis, synthesis, evaluation and application . . . . (p. 14)

In short, we conceptualize reading as a complex sociolinguistic task that depends on an understanding of how a text relates to other texts and events and involves students in looking critically at subject matter.

After coming up with research questions, we decided to move forward in two ways: 1) by educating ourselves more about the role of reading on our campus and other campuses, and 2) by trying to make reading more of a focus on our campus. Based on our own experiences with teaching, we felt that we needed to research and communicate to other professors about both general reading issues and discipline-specific issues. When we say discipline-specific literacy we mean the reader's ability to understand not only discipline-specific content, but to apply discipline-specific reading practices and "habits of mind"—reading like a scientist, or reading like a historian (Fang, 2012; Fang & Coatoam, 2013).

We began our work by looking at what college-level reading literature and discipline-specific literature has to say about issues in college-level reading. We then narrowed our focus to investigate the effectiveness of assigned reading in several areas of science, hoping to do the same research for several additional disciplines in the future. We collected data by interviewing ten science professors on our campus and found that they also had concerns that were both general and subject-specific. Their responses led us to think more deeply about the quality of student reading and how best to prepare students to read particular genres, such as journal articles and textbooks. Another important result of our interview research was that we now had local data to begin to share with the other faculty to spur conversation about reading on campus. What we *didn't* have was the student perspective. We committed ourselves to design a survey to gather information about student experiences of reading—beginning with science classes.

After reading and interviewing science professors, we felt like one response to our campus's reading problems was best characterized by the idea of "Reading-Across-the-Curriculum" (Horning, 2007, para. 1). There are many common problems we face as professors when we assign reading in our subject areas and also important content-specific issues, and both of these seem to be addressed by the idea of reading-across-the-curriculum. Kim and Anderson (2011) reported how the Fayetteville State University implemented a Reading-Across-the-Curriculum Program, which included professional development for professors, course revisions, workshops for students, and a shared campus text (*Student Health 101*, an online magazine) aimed at increasing student reading. The Fayetteville Program included both a focus on general reading strategies (workshops) and on reading in particular

disciplines and classes (course revisions and workshops). They were taught and asked to share their own general reading strategies like "summarizing, reviewing, synthesizing, and outlining passages" (Kim & Anderson, 2011, p. 32), and they were also encouraged to "take the initiative in researching reading comprehension strategies most common to their disciplines . . . " (p. 31). Funds were available to pay stipends to faculty who attended workshops and revised their courses to include more activities that directly focused on improving reading comprehension.

The Fayetteville University Program is reminiscent of writing-across-the-curriculum programs of the 1990s and 2000s, which have helped many students and professors clarify writing goals at many colleges, including our own university. Students need our help with tackling college-level reading as much as they need help with college-level writing. In the rest of this chapter, we will explore what we have found out from others' inquiries into these issues and what we have done to begin the process of creating a Reading-Across-the-Curriculum climate on our campus.

College-Level Reading Issues

There are several factors that seem to contribute to college students' difficulties with college-level reading. First, students receive little direct instruction in how to approach reading after elementary school (Odom, 2013). Second, professors are often at a loss about how best to motivate students to read (Horning, 2013; Odom, 2013). And third, professors either don't realize that they need to provide direct guidance in the art of reading, or struggle to find ways to convey discipline-specific reading strategies (Horning, 2013; Odom, 2013). Students have little experience that prepares them for discipline-specific college-level reading, and while professors in great numbers worry about reading, they feel unsure about what to do about it.

Although many professors assign reading and expect students to comply without any immediate extrinsic reward (besides doing well in class because of knowledge from the reading), others intentionally give quizzes or questions directly linked to the readings, in order to motivate students to read. It has been suggested by research that such assignments need to count 20% or more to have any effect at all on students' reading cooperation (Nilson, 2010).

Unfortunately, questions or writing about reading have not been shown to have universal impact on students' understanding of reading. Odom (2013) reports that writing assignments that acted as "quizzes" did not produce favorable effects. Students' perception of these writing assignments as "quizzes" seemed to hurt their effectiveness. Odom concluded that students were used to seeing these kinds of quiz-like questions and answered them the way they always had in the past—in the most "superficial" way possible (p. 10). Students did not receive any communication about how to approach their reading that gave them any direction about how

to interact with the material beyond proving that they had read it.

In the sciences, it is important that students have some training in reading and critically analyzing published information in scientific journals. Whereas undergraduates are accustomed to reading textbooks and taking notes in lectures, they often find it difficult to understand research articles in the basic biomedical sciences. While there is general agreement among scientists that comprehension of scientific papers and communication of scientific concepts are two of the most important skills we can teach undergraduates, few undergraduate biology courses make these explicit course goals, or attempt to teach these skills (Brownell, Price & Steinman, 2013).

Outreach: Cultivating a Reading-Across-the-Curriculum Climate

Before we began collaborating, each of us had been working on our own, bringing awareness to reading issues on campus. Pam had requested to be able to conduct a one-session reading workshop for subject-area peer-tutors during their summer training. Margaret and Douglas had been leading professional development workshops for professors on reading and literacy through the University's Center for Teaching and Learning, and Maureen had been running a Biology book club for Biology students. What changed when we began working together was that we started characterizing the work we continued to do as a concerted effort toward raising consciousness about reading on campus. We started trying to nurture a campus dialogue about reading issues whenever we could. We presented our findings to our Education Department and to a wider group of faculty at an unpaid voluntary professional development workshop through our University's Center for Teaching and Learning.

At the Center for Teaching and Learning workshop we hoped to build momentum for what we perceived as a growing conversation about reading on campus. With the work we had each been doing to make strides, combined with the recent interviews of science professors, we felt like we were moving in a good direction. We also wanted to provide a space for professors to talk about their concerns about reading, and take the opportunity to gather information about their perceptions about students. Since we were planning to do a survey of students' attitudes toward and experiences with reading, we thought their input would help us formulate survey questions.

We ran our workshop with a group of roughly 20 professors over the course of one hour. The group represented faculty from throughout the university. After sharing our concerns and our findings thus far, we opened up the floor to hear what professors on campus had to say. We asked them what their general concerns about reading were *and* what their discipline-specific concerns were.

We found that professors on campus in many different subjects had a lot to say about their students' reading. They were concerned about students' lack of experience with reading college-level texts. This inexperience revealed itself in areas of vocabulary, textual structures, and approaches to reading a particular genre. Professors also worried about students' general lack of strategies for reading, such as identifying key points vs. details and setting a purpose for reading, and expressed a desire for the university to offer workshops to help teach these skills to students. The professors discussed changing societal approaches to and attitudes about reading. There was speculation that technology and social media may be changing people's reading skills and their expectations of how they need to read.

We then asked about disciplinary-specific issues and the professors talked about the detailed nature of reading math textbooks and issues specific to science classes. Science professors talked about the importance of students being able to understand how to read a scientific journal article and praised textbooks that are better constructed to scaffold for student-readers, such as David Klein's (2014) text on Organic Chemistry, which is very visually-oriented. These comments echoed research showing that purposeful instruction in reading particular genres is very useful. Gogan's (2013) study of a "required, writing-intensive course" supports the idea of *direct instruction* as helpful in increasing ability to read in college-level subject area classes (para. 14). Gogan reported that an assignment where students chose a scholarly article in their major and then dissected it using genre study was found to be perceived by 60.4% (marked agree) of students as having "helped me prepare for academic reading in my discipline" and was reported to have great impact a year later by students who were interviewed about the assignment.

To help students approach the challenge of reading research articles in the basic biomedical sciences, Rangachari and Mierson (1995) developed a checklist to guide students in the analysis of different components of a research article. In their study, students were assigned an article (usually a short communication) where techniques were familiar to them, and were asked to use a checklist to help them critically analyze the article. The students were asked to write a paper assessing the article and also to respond to a questionnaire evaluating the experience and their ability to understand the article. Students had positive responses to the questionnaire and rated the experience helpful.

As a result of this conversation, professors also shared some techniques that have been working to improve student reading. For example, responding to student feedback indicating that students often wait until after a lecture to do the assigned reading (in order to get some perspective about what is important), some professors said they now "flip" their classes, meaning that they record lectures and post them online, so that students themselves can make the decision about whether to read before or after the lectures. Flipping classes as a technique also makes class time available for the application of reading material, as opposed to "going over" reading

material. This technique is also in line with the finding we mentioned earlier that students will read more if they are asked to apply the reading to an activity.

Odom (2013) found that Writing Across the Curriculum Faculty Fellows who were trying to use writing to improve students' reading were more successful when they very consciously changed the assignments that go along with reading to be more than a "reading check." She alludes to the idea of direct instruction in how to read a particular kind of piece, but spends more time on the areas of personal and real word connections and authentic assignments:

When faculty made changes not just in how they assessed student reading compliance but rather in how they asked students to approach their reading, they found real improvement in students' comprehension of material and their abilities to use what they read to their advantage throughout the course (p. 10).

As their responses showed, the professors were already tuned into students' experiences, but we asked them to focus even more on their students' experiences with college-level reading by asking them, "If you could ask students anything about reading in college, what would you ask them?" Their questions for students conveyed earnest interest in students' feelings about and experiences of reading for college classes. Below were the most frequently articulated questions professors attending the Workshop wanted to ask their students.

Professors wanted to know about student perspectives on reading:

- Why don't you read?
- What is most challenging about reading?
- What difficulties do you experience when reading?

Professors wanted to know what they could do to make a difference:

- What would make you read it?
- What support do you need?
- How can I facilitate your reading?

Professors wanted to gauge how students think about the role of reading in their lives:

- What are you getting out of reading?
- What benefit do you derive from reading?
- What can you find in a good book that you cannot find from any other experience?
- How important do you think reading is to your future success in life?

Professors wanted to inquire about how they read:

- What procedure do you use?
- How do you prepare to read?
- During reading, what else are you doing?
- How aware are you of the author's language choice when you read?
- Do you ever look up words? What do you do when you don't understand?

From the professors' responses and questions for students we see a very current and authentic interest in issues of student reading. The professors are concerned about students' difficulties with the reading for their classes. It has come to their attention that students are struggling. They have also noted the lack of resources on campus set up to address students' reading difficulties. Professors we have talked to are interested in increasing the effectiveness of their reading assignments as teaching tools. They talked about student reading as a shared problem between professors and students.

The professors' questions for students highlighted the active nature of reading we discussed earlier in this chapter. They underscored the time commitment reading takes and the competing demands students face. They are interested in intersections between larger societal forces affecting our approaches to reading and what is happening on our campus. They are not involved in a "blame game." Instead they show a strong interest in making things better by using student feedback and trying new general and content-specific approaches to reading to make student reading more doable and successful. The professors we spoke with are already trying some things and are looking for more organized support for reading on campus.

Moving Forward: Gaining Visibility for Reading

We came away from our first organized "outreach" at the Center for Teaching and Learning Workshop as a Faculty Learning Community feeling energized. We outlined some short and long term goals. We are continuing with our collection of data—this time through a survey reporting on student reading experiences in science classes. That, combined with possible follow-up one-on-one interviews, should give us some interesting complementary data to add to our findings about science professors' experiences. We hope to repeat this model for another subject area; we are planning for history. We will keep sharing out our findings through professional development workshops and our departmental meetings. Uncovering successes and difficulties in reading in classes across campus will give us some

concrete concerns to address and to get others interested in addressing.

In the long-term, we think that we need to keep doing the work we have been doing individually, but now as part of a (hopefully growing) network of reading-focused professionals on campus. Whenever we speak publicly now on campus we will link the work we are doing together to show that it is all connected. Workshops for faculty on reading strategies and issues as carried out in the Fayetteville University example sound like a good idea, as do workshops for students. However, collecting data first on professor and student needs seems to make sense.

Perhaps what is particularly challenging for us is that we are trying to amass data to convince stakeholders that there is a problem with reading on campus, while at the same time creating an immediate dialogue to bring reading into the light right now. We see college reading as a complex endeavor, which many students are not prepared to undertake successfully. Because we think college reading is an interdisciplinary issue, we want to create a Reading-Across-the-Curriculum climate now. We don't want to wait. So, we are trying to do that—shift people's thinking about reading—so that reading for classes is not seen as only a delivery method for material, but instead as a complex set of strategies, skills and approaches that need direct and thoughtful attention across the curriculum.

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