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The Importance of College Reading: Professors' and Students' Views

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Abstract. Professors and students have contradictory views of course reading. Professors believe that reading outside of the classroom is essential in optimizing learning. However, students often find the readings to be time-consuming, not necessary to pass the class, and an option rather than a requirement. We surveyed 449 undergraduate university students and interviewed 17 university faculty to determine the perceived value of reading assignments in college classes. This preliminary study yielded that faculty could benefit from professional development workshops that will help them determine how to incorporate strategies to increase the students' completion of assigned readings. By investigating students' thoughts and concerns, professors can better understand how to make assigned readings more attractive to students.

Keywords: college reading; student perceptions; interdisciplinary

While writing-across-the-curriculum has been accepted in university academic departments since the early 1990s, reading-across-the-curriculum has received fewer productive resources or attention. As with writing, college professors find that students need to work on reading to gain general college-level skills as well as discipline-specific reading skills. Neither college-level writing nor reading are necessarily taught before college. Despite this, reading woes at the college level have not been able to gain the status of writing woes, which led to the writing-across-the-curriculum (WAC) movement. The WAC movement has increased resources for college writing instruction, including first-year and writing-in-the-disciplines classes. With these improvements, shortcomings in the development of reading skills have become more apparent. Professors complain that students are not completing the assigned reading, and students admit they skip the assigned reading, leaving us to wonder about the correlation between the two. This research article investigates the difficulty college professors and students face regarding assigned reading to determine the potential causes of these reading issues. The results of this study reflect the localized experiences of our students, who are largely first-generation working- and middle-class students. However, most of their experiences and the observations of our professors align with what other researchers found from a cross-section of colleges.

We—two literacy education, one science education, and three history education faculty—approached this subject because we have genuine concerns about how a possible mismatch between professors' and students' beliefs about college reading

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may be impacting both instruction and learning outcomes in our classes. We all heard professors *worrying about the reading not getting done* and, at the same time, had heard students talking about *not needing to and not doing all the reading*. We set out to document our anecdotes with empirical research by interviewing professors from different subject areas followed by surveying students online.

There are several factors that seem to contribute to students' difficulties with college level reading. Students receive little direct instruction in how to approach reading after elementary school, professors are at a loss about how to motivate students to read, and professors either do not 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, 2013b; Odom, 2013). Reading at the college level is not necessarily a natural process but is an art that can be taught. Students also have little experience that prepares them for discipline-specific college-level reading, and while professors in great numbers worry about reading, they are perplexed about what to do about it.

We began our work by gathering data that would help us communicate our concerns. Our overarching questions were as follows:

1. "What common issues and problems do we as professors face with student reading?"
2. "What content-specific issues/problems do we as professors face with student reading?"

These questions led us to question more specifically our students' experiences with reading. This resulted in the following additional questions being posed:

3. "What gets in students' way when it comes to reading?"
4. "What can we do to make our students' experiences with reading better?"

After developing these research questions, we proceeded in three ways: 1) by educating ourselves more about the role of reading on our campus and other campuses through workshops with faculty sponsored by our Center for Teaching and Learning; 2) by interviewing professors about their experiences with student reading; and 3) by gathering quantitative and qualitative data about students' perceptions about the reading done for classes on campus. We chose to research both science and history with hopes that this same research can be done in other disciplines in the future.

College-Level Reading

Although many professors assign reading and expect students to comply without any immediate extrinsic reward (aside from 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. The latter professors

find that these strategies help with reading completion (Brown et al., 2016; Phillips & Compton, 2016). Previous research has found that such assignments need to count as 20% or more to have any effect on students' reading cooperation (Nilson, 2010).

Questions or writing assignments in correlation with assigned readings have not been shown to have universal impacts on students' understanding of reading. Odom (2013) reported that Writing Across the Curriculum Faculty Fellows using writing assignments, which acted as quizzes, did not produce favorable effects. Students' perceptions 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).

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 a general agreement among scientists that comprehension of scientific papers and communication of scientific concepts are two of the most important skills that we can teach undergraduates, few undergraduate biology courses make such comprehension explicit course goals or attempt to teach these skills (Brownell et al., 2013).

Literature in the area of college-level reading points to purposeful reading, direct instruction, authentic assignments, personal and "real world" connections, and intertextuality as tools for helping college students with college-level reading (Gogan, 2013; Odom, 2013). Odom (2013) also found that Writing Across the Curriculum Faculty Fellows who attempted to use writing to improve students' reading were more successful when they consciously changed the assignments that go along with readings to be more than a reading check. She alluded 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-world connections and authentic assignments:

> When the 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 ability to use what they read to their advantage throughout the course. (p. 10)

Odom (2013) quotes an English professor who used to give reading quizzes but now guides new open reading reflections by giving this direction: "I did specify that students were not to summarize the reading but to work through their reactions to the text" (p. 10). This professor makes the reading assignment more personally engaging and directed and does provide a bit of guidance. However, the professor did not provide direct instruction or mentoring in academic reading.

Another professor in Odom's (2013) study had students make connections between their reading and current events. Odom believes that establishing a personal or real-world experience is important for reading. Certainly, this idea of the importance of a personal connection with one's reading has been established in educational theory and research on motivation and learning (Willingham, 2010).

Gogan's (2013) study of a "required, writing-intensive course" supports the idea of direct instruction as helpful in increasing a student's ability to read in college-level subject area classes. 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% 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.

College Science Class Reading

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. The students were asked to use a checklist to help them critically analyze the article, write a paper assessing the article, and 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 as helpful.

A writing intensive course format was used in a study by Brownell et al. (2013) to boost undergraduate biology students' confidence in their abilities to read scientific literature and communicate what they learned to scientific audiences. In the course, students discussed primary articles in class, summarized articles from the *New York Times*, typed articles about the topic, and, as a final assignment, wrote a review article on a topic of the students' choosing in neuroimmunology. Pre- and post-course questionnaires showed that the students' perceptions of and confidence in their abilities to read scientific literature increased following the course.

College History Class Reading

Sam Wineburg (1999) responds to the misconceptions students have about history being simply the memorization of events and dates when he makes this observation: "The funny thing is that when you ask historians what they do, a different picture emerges. They see themselves as detectives searching for evidence among primary sources to a mystery that can never be completely solved" (p. 2). Historical thinking, which has at its center the critical reading of texts, is "unnatural," as Wineburg terms it, for many college students. History professors thus work to make the work of historians explicit and accessible to their students. They identify the implicit questions (when, why, who, where, what's missing, and what's the broader context) that historians ask of the texts they encounter and ask

students to follow their lead. History professors also work to expose students to a range of historical texts, although individuals may prioritize some over others: textbooks, a variety of primary sources, and secondary sources. The goal is to get students to understand how to read for argument rather than simply for facts. Ultimately, students should be able to understand historiography, or the history of how history has been written, and be able to situate their own work in the context of what has already been written.

Nonetheless, history professors frequently bemoan the difficulties in getting their students to read, and they struggle to balance the rewards of uncoverage with the needs of covering core material. Greene (1993) pointed to a disconnect between the way that history professors and their students think about reading, the value of sources to their writing, and the ways that other texts are employed in students' writing. The professors want students to stay true to the meaning of the original text while using it in the service of constructing interpretive arguments. Traditional history college classes followed the "lecture-textbook-test" model, but history professors are increasingly experimenting with other methods to foster student learning. Many of these approaches center on attempting to train students to "read like historians," employing more active stances toward reading such as annotating (Simpson & Nist, 1990); critical evaluation of source, context, and evidence (Hynd et al., 2004); and prioritizing information (Pace, 2004). A number of professors explicitly teach their students reading strategies, such as "Predatory Reading," which gives students permission to skim and the skills to identify argumentation (Rael, 2004).

These methods, however, require substantial and effective reading by students, and many students do not appear up to the task. Students appreciate the focused detective work and exploration allowed when classes explore a particular event, question, or experience. When there are in-class readings, which are necessarily short, these exercises can work well. However, if students are unable or unwilling to read longer documents in preparation for class, these exercises become especially time-consuming, and professors fear that students are losing out on the full narrative of the field. How to persuade students that this work is worth the extra effort is something that has not generally been addressed by the history literature. Additionally, research investigating the transition to higher education has shown that students are often unmoved to try new methods of studying and reading in college (Armstrong & Newman, 2011). History professors generally agree on the value of incorporating primary sources into the classroom, often in conjunction with a traditional textbook, although some faculty have ceased to assign the textbook altogether. There is less of a clear path to incorporating peer-reviewed books and articles by historians, especially in the survey courses, as these readings require yet another skill set to read dense, detailed academic prose.

Methods

Faculty Interviews

After gaining Institutional Review Board approval through our university, we combined qualitative and quantitative methods for this research. We decided to use phenomenological interviewing because we wanted to find out how the professors constructed the experience of assigning reading and interacting with students around texts for the class. Phenomenological interviewing allows researchers to get at the meaning participants make of a particular experience (Seidman, 1991), and we coded the data to find themes. We interviewed 10 science professors at Westview University (a pseudonym). Each professor was interviewed once for a period of 30–45 minutes; the professors were from the following fields: chemistry (2), biology (4), physics (2), and earth science (2). In the history phase of our study, we repeated the same procedure with seven history professors. These professors teach a variety of history courses, but we did not categorize them the way we did the science professors, whose expertise focused on very different fields of science.

Our interview questions can be found in the Appendix. The questions covered the general areas of student reading compliance, reading assignments, and assessment of quality of reading.

Student Surveys

In order to triangulate our data from professors with data from students, we needed to discover why students made decisions about reading. Since we wanted to gain an understanding of how many students were reading and how much they were reading, we decided to use a survey format which would result in both qualitative and quantitative data about students' experiences with course reading. An anonymous online survey with 15 questions, including short answer, multiple choice, and demographic information questions, was distributed to the entire undergraduate student body (6,000 students) via email. We received 327 completed surveys from the science class phase and 121 completed surveys for our history phase. In order to complete the survey, students had to have taken a science class or a history class within the past two semesters. See Table 1 for information about students who completed surveys. The actual survey can be found in the Appendix.

Table 1

Student profiles

Science Students	History Students
• 327 completed surveys	• 122 completed surveys
• 30 majors represented	• 22 majors represented

• similar distribution of years (1st, 2nd, 3rd, 4th) • 75% (245 students) were age 18–22 • 79% (258 students) were female, 21% (69 students) were male	• similar distribution of years (1st, 2nd, 3rd, 4th) • 68% (82 students) were age 18–22 • 66% (80 students) were female, 34% (41 students) were male

Results

Overlapping Findings from Professor Interviews

Results reflected that the majority of both the science and history professors had concerns about the effectiveness of student reading, both in terms of their completion and comprehension of the reading. It was also found that the majority of professors were concerned about student compliance. Professors reported that students wait until after lectures to do the reading. They also reported that student reading compliance was more of a concern in the introductory and general education (LASC) classes. Professors reported that students were more likely to do reading if they earned a concrete reward for doing so, usually a grade. In general, students seemed to make calculations about the importance of reading for classes. In other words, they make judgements about whether it is worth their time to do a particular reading. According to one history professor, "Learning is a result of trust and delight. We need to gain the trust of the students that the reading is worthwhile."

Both groups of professors found that students had trouble meeting faculty expectations that they would read like practitioners in those fields. One science professor said, "Once you're beyond it, it's hard to see it as the student. What we want them to do is learn to read like experts in the field. We know how to do that, but it's difficult to remember how it was before we learned to do that." In general, professors found that students do not have foundational concepts and lack experience with reading the genres favored in each field. Additionally, both groups of professors felt that students prefer videos, podcasts, and visuals in general over reading. Many students have more experience with digital and interactive visual online formats over textbook reading.

Science-Specific Findings

The science professors believed students need more preparation before being able to read science journal articles. They expressed concern that students need training in how to read the genre of journal articles, focusing on the different sections of a research study. The professors also mentioned the importance of specialized vocabulary necessary for students to learn (including math concepts), so they can read successfully in science classes. Some of this highly specialized vocabulary may not be seen in other parts of students' lives, so they have a harder time connecting it to pre-existing knowledge.

History-Specific Findings

History professors expressed concern for students' lack of ability to read for the argument a writer is presenting as opposed to only reading for information. Professors would like to see students make more of a connection between history classes and other classes, as they read and do classwork. History students are asked to look at many sources on the same material; therefore, students need to be able to understand different sources in relation to each other. They also need to understand complex context surrounding historical texts. The history professors expressed concern about how students often read unskeptically, accepting all history information as the truth. This belief, according to one professor, "is an obstacle to critical interrogation of historical sources and interpretation." As with science texts, history also has its own unique vocabulary, which professors also saw as a challenge for students.

History professors also pointed to a lack of confidence students have in class discussions. They believed students had a fear of being wrong in their interpretations or looking unintelligent during class discussions.

Student Surveys

We found that across science and history students, there were no significant differences regarding the number of pages assigned per week (see Table 2). Likewise, the percentage of students who answered that they "did NOT complete the assigned reading on most days" was spectacularly high for both history (70%) and science (> 60%) (see Table 3).

In probing likely reasons for skipping or skimming reading, both science and history majors pointed to a perceived difficulty of the reading. Twenty-five percent of history students and 40% of science students reported that the readings they skipped were either difficult or very difficult (see Table 4). But both student groups reported that time was a major factor in skipping readings (44% of science students and 50% of history students). Notably, only science students explained their skipped readings, choosing "Reading was not necessary for me to get good grades on quizzes or exams" (39% of science students) and "Reading was not interesting to me" (38% of science students) (see Table 5).

Returning to the question of difficulty, we noted few significant differences when asking students why they found their reading difficult—roughly the same percentage of each group agreed that "Text organization/writing style was too hard/dense to work through" (21% science; 18% history) and "Text had too many new/difficult/unfamiliar vocabulary words" (18% science; 18% history), but science students were more likely to complain of a lack of background knowledge as a contributor to a feeling of having difficulty with reading (19% science; 11% history) (see Table 6).

Table 2

Quantity of Reading Assigned

Number of pages assigned per week	Science Students	History Students
20–40 pages	12%(n = 39)	17% (n = 21)
10–20 pages	31% (n = 99)	29% (n = 35)
20–30 pages	25% (n = 80)	26% (n = 32)
1–10 pages	21% (n = 87)	12% (n = 14)

Table 3

Completion of Assigned Reading

	Science Students	History Students
% of students that did NOT complete the assigned reading on most days	> 60% (n = 206)	70% (n = 76)
Read a portion of the reading on most days	25% (n = 82)	
Skim quickly over the reading most days		27% (n = 33)

Table 4

Perceived Level of Difficulty

	Science Students	History Students
Very Easy	4% (n = 14)	
Easy	10% (n = 33)	
Neutral		50% (n = 60)
Not too Difficult	45% (n = 142)	
Difficult/ Very Difficult	40% (n = 126)	25% (n = 26)

Table 5

Reasons for Not Reading

	Science Students	History Students
Level of difficulty	18% (n = 48)	10% (n = 10)
Reading took too long (Time constraints)	44% (n = 110)	50% (n = 52)

Reading was not necessary for me to get good grades on quizzes or exams.	39% (n = 105)
Reading was not interesting to me.	38% (n = 94)

Table 6

Reasons Why Reading Was Difficult

	Science Students	History Students
Text organization/writing style was too hard/dense to work through	21% (n = 60)	18% (n = 19)
Text had too many new/difficult/unfamiliar vocabulary words	18% (n = 52)	18% (n = 19)
Missing background knowledge	19% (n = 46)	11% (n = 12)

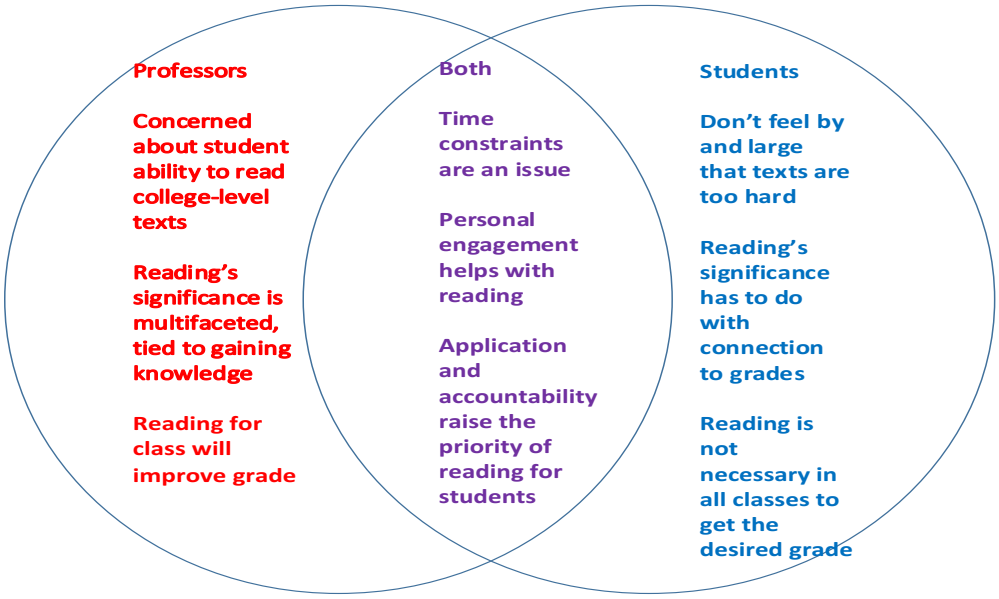
Comparison of Professors' and Students' Beliefs

As Figure 1 (pictured below) shows, professors and students in our study had differing perceptions about the importance of reading. Students' decisions were driven by much more pragmatic concerns about immediate consequences of doing or not doing reading and time constraints. Professors, on the other hand, held to their beliefs that reading is a long-term investment that is important because of its impacts on a wide variety of practical and intellectual activities, skills, and ways of being. Professors did share students' focus on grades, but students had in their mind a grade they would be okay with, even if it was not the highest grade they could get. In contrast, professors felt that students could get higher grades if they did read and could not support students avoiding reading because they did not care about getting that higher grade.

Professors of both science and history are concerned about the underlying reasons that students might struggle with college-level reading, and they want to help students with those skills. Students do not seem to be aware of or concerned about their lack of these skills. As our survey results show, most students do not consider the assigned texts to be too hard. Based on the professors' concerns and the literature on college-level reading, which characterizes college reading as a very complex activity (Horning, 2007), students may not be aware of what they are missing during their interactions with a text.

Figure 1

Comparison of Professors' and Students' Beliefs



Discussion

The student surveys affirmed what we and the science professors we interviewed believe about student reading: a lot of it is not getting done. The reasons for this go beyond issues within our control as professors. Students have competing demands on their time that include work schedules and other classes. There is also pressure from social media, including acquiring the habit of getting information in small, often visual and auditory bites, which may essentially be training students not to dedicate longer blocks of time to reading (Horning, 2013a).

Complexity of text is a contradictory issue between professors and students. In their interviews, professors reported that the dense, advanced language is a challenge for students who are new to college-level texts and can hinder the completion of reading assignments. The students, however, attribute lack of time and the reflection of reading completion in their grade. If we accept that there is some truth to both these views, professors are in a position to help students by explicitly teaching reading skills, restricting the amount of reading assigned for each class, and assigning work that allows students to apply their knowledge of the text.

A genre that may need to be reexamined in reading skills is textbooks. Research shows that 68% of U.S. faculty required textbooks for classes (Collins-Dogrul &

Saldana, 2019), and while the science professors interviewed had begun helping students to learn how to read journal articles, the skills required to read textbooks received no special attention. There may be an assumption that students already know how to read textbooks, but information collected via interviews with professors indicated that some students may need support with college level reading, including textbooks. Direct teaching about the parts of and genre of textbooks holds promise for student reading.

The professors we interviewed were very aware of the often-misaligned perceptions of professors and students when it comes to reading. For example, several of the science professors noted that students completed readings only after the lecture because they perceived that the professor would tell them what was important to focus on in the lecture, while the professor generally considered the lecture as a reinforcement of the reading.

The survey revealed that students believed the reading was not necessary to achieve the desired grade. Repetition of information in PowerPoint slides and in-class discussions of main ideas from the reading may be viewed as redundancy, leading students to neglect the reading because it will be covered in class. It is interesting to think about how students perceive the actions we take. Our study points to the importance of considering how we as professors might more accurately present ourselves and our values when it comes to reading.

The professors we interviewed, in line with other researchers' reports, are in agreement that more relatable material correlates with better compliance. Holding students accountable also seems to be a highly effective motivator. When students are required to apply material in written or oral assignments, there is a higher rate of engagement with reading. Additionally, students seem to do better when they have a guide to reading (e.g., guiding questions, a podcast of lecture). Finally, professors and study skills experts find that students benefit from mentorship about reading different genres.

Conclusions

This study has implications for college teaching on a number of levels. Students in large numbers are not engaged with their assigned reading. The professors' and students' perceptions collected in these interviews and surveys show a misalignment between the two groups. Although professors have a sense that students are not fully engaged with their reading for class, students' reasons for not complying include time constraints and perceptions that reading is not necessary or valued by the professor. If we as professors really do value reading, we have some public relations to attend to.

College administrators and professors can benefit from our findings about students' struggles to read college texts. Such struggles include not only text difficulty but also fewer tangible issues of reading expectation for each discipline, such as time constraints. Students would benefit from the teaching of college-level reading

strategies and genre study in discipline-area classes, mirroring the WAC concerns over writing for particular disciplines. Faculty could benefit from professional development workshops to help them incorporate these strategies into their classes.

Workload is a major factor for students. Those who work with college students could benefit from this finding about students' time conflicts. An increasing number of students work while attending college (Lewis, 2020). At a state university like ours, the number of students working and the number of hours they work are very high. Regarding students' and professors' perceptions about the importance of reading, those tasks that are considered most important will be done first within a very crowded schedule. If reading is very important to students, we need to make sure we can communicate that to them effectively while also being mindful of the quantity of reading assigned and how students can prioritize it.

Professors in our study and other researchers urge a consideration of balance between the quantity and quality to address both time availability and the effectiveness of reading that does get done. Aagaard et al. (2014) found that students were more likely to do reading if it was what they considered short and would be used in class. There is a recognition that quality of reading and engagement is very important and should be considered in relation to quantity of reading.

The lack of explicit classes with "Reading" in the title is suggestive of the stigma that seems to exist in talking about college reading. At one time, college writing also received far less attention than it does today. The WAC movement gained traction with the recognition that writing scientific lab reports was very different from writing political science essays. Writing is something concrete that is produced and handed in for a grade. Reading is often a personal experience that happens in the interior of the mind. But reading is just as important as writing and is a part of the same skill set that students need (flexibility and the ability to interact with language in different situations) to make them effective communicators in life. In order for students to achieve these skills, college reading must pivot to "across-the-curriculum" as well.

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this article.

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Appendix

Interview Questions for Science and History Professors

How much reading do you assign for each class?
How is student compliance for reading completion in your classes?
Are you happy with the way students are completing reading in your classes?
How is student compliance for reading completion in your classes?
In what ways do you evaluate student reading compliance? Are students held responsible for the readings? If so, in what way(s)?
What kinds of reading assignments do you assign, including digital and multimedia texts? (Genres)
What kinds of assignments do you give students to go along with reading?
What challenges do you think students might face with the reading in your classes?
What has worked well in the area of reading in your classes?
What has not worked well in the area of reading in your classes?
What kind of guidance and support do you give your students in the area of reading?
When do you give this guidance and support? Before reading? During reading? After reading?
What special challenges do students face because they are reading in the area of science?
What is valued in science in the area of reading and writing—in other words what is science literacy?

Student Survey for Science and History

Dear Student,

Please take a few moments to complete this survey regarding your experience(s) with reading in science classes here at Westview University (WSU).[1] Your input will be very valuable for a research study being conducted here at WSU. Please note that all your responses are confidential and completely anonymous. If you would like to be entered into a random drawing for a $50 gift card from the WSU Bookstore, please enter your name and email at the end of this survey. Your anonymity will still remain if you decide to enter the drawing. There is no way for the researchers to link your name to your responses.

Thank you

Faculty Learning Community Team

Question	Answers
Are you 18 or older?	_____ Yes _____ No
Did you complete a science course in Fall 2014?	_____ Yes _____ No (if answered 'No' student will be asked about Spring 2014)
Did you complete a science course in Spring 2014?	_____ Yes _____ No (if answered 'No' student will be directed to the end of the survey)
When answering questions about the reading in your science class, please think of the class that* *met earliest during the school week if you took more than one.* *What area of science and level was the course?* *(drop down menu with area of science and level 100-400 listed) How much reading was assigned for this class per week?	_____ 1-10 pages _____ 10-20 pages _____ 20-30 pages _____ 30-40 pages _____ 50+ pages
How much of the assigned reading did you do for this class?	_____ All reading every day _____ All reading most days

	_____ A portion of reading most days _____ Skim quickly over the reading most days _____ None of the reading most days
What type of texts did you read for this class (choose all that apply)?	_____ Textbook _____ Journal Articles _____ Newspaper Articles _____ Other (please specify): _____
How difficult is the reading for this class based on a scale of 1-5?	Very Difficult (1) Difficult (2) Neutral (3) Easy (4) Very Easy (5)
If you did not do all the reading for the course, please indicate any of these factors which contributed to your decision (choose all that apply):	_____ Reading seemed too difficult _____ Reading was not required for me to participate in class discussions _____ Reading was not necessary for me to get good grades on quizzed or exams _____ Reading was not interesting to me _____ Reading took too long _____ Reading required a journal log _____ Reading did not relate to in-class activities _____ NA (I did all the assigned readings) _____ Other (please specify):
If you did not do all the reading for the course, which of these features of the readings	_____ Text had too many new/difficult/unfamiliar vocabulary words _____ Text assumed background knowledge I did not have

themselves had the biggest impact on your decision (choose all that apply):	_____ Text organization/writing style was too hard/dense to work through _____ Text discussed concepts that were too advance/difficult for me to grasp _____ NA (Decision was based only on factors unrelated to the difficulty of the text itself – e.g., time constraints or lack of interest) _____ NA (I did all the assigned readings) _____ Other (please specify):
What is your gender?	_____ Male _____ Female
Age Range:	_____ 18-22 _____ 23-30 _____ 31-40 _____ 41+
College Year:	_____ First-Year _____ Sophomore _____ Junior _____ Senior
What is your major (1st major only)	(drop down menu with all undergraduate majors listed) _____

If you would like to be entered into the random drawing for a $50 gift card to the WSU Bookstore, please enter your name and email address. Please remember that the researchers cannot link your name to your responses to this survey.	Name: _____ Email Address: _____
If you would be willing to be interviewed about reading in science classes in more depth please enter your name and email address. If not, click on 'Next' Please remember that the researchers cannot link your name to your responses to this survey.	Name: _____ Email Address: _____

Thank you for completing this survey. Your input is very valuable.