

In Defense of Reading Quizzes

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Many students fail to read the assigned material before class. A failure to read is detrimental to both student learning and course engagement. This paper considers the often-neglected teaching technique of giving frequent quizzes on the reading. Drawing on the author's experiences assigning reading quizzes, together with student opinions about the quizzes solicited in end-of-semester surveys, this paper suggests that quizzing students on the reading has much to recommend it, and that common reservations about the practice are unfounded.

Reading assigned texts before class is a valuable activity for any student. Still, many students decide not to do the reading. Unfortunately, failing to read leads to many undesirable results. Students who have not done the reading face more difficulties understanding the day's material. Additionally, such students are less engaged and less likely to contribute to class discussion. According to Karp and Yoels (1976), student self-reports indicate that failure to do the reading ranks among the strongest predictors of student non-participation. But the value of reading extends beyond facilitating a successful class meeting. Reading outside of class is a crucial step towards acquiring central skills, both general and discipline-specific, that many courses aim to impart.

In light of the above, quizzing students on the reading might be a useful teaching technique. Yet, reading quizzes are frequently dismissed as impractical or harmful or both. Drawing on my own experiences using reading quizzes in philosophy courses, together with student feedback collected in surveys about the quizzes, this paper considers—and ultimately defends—the merits of this teaching method. Asking students to respond to daily reading questions has much to recommend it, and moreover, many reservations about the teaching method may be misplaced.

Encouraging Reading

Students often fail to read if they think that reading is not necessary to do well in the course (Hobson, 2004). It is important, then, that reading is treated as a non-optional, important part of course work. Among the common suggestions for improving reading compliance, giving quizzes is usually absent. Consider, for example, the following recommendations one finds in the college-teaching literature:

- Explain the reading assignment's relevance and preview the reading (Hobson, 2004).
- Pose non-adversarial, unthreatening questions to the class about the reading (Gaede, 1989).

- Assign the reading close to the use date (Davis, 1993; Hobson, 2004).
- Set aside class time to allow students to read (Davis, 1993; Hobson, 2004).
- Include exam questions on elements of the reading not covered in class (Carkenord, 1994; Davis, 1993; Hobson, 2004).
- Ask students to complete summaries of reading either for extra credit, for use on a subsequent exam, or for a grade (Bean, 1996; Carkenord, 1994).
- Assign a reading log (Bean, 1996).
- Have students answer questions about the reading online 2 hours before class meetings and discuss student answers in class (Howard, 2004).
- Ask students to construct multiple-choice questions on the reading (Bean, 1996).
- Distribute study questions prior to the reading (Bean, 1996).

While these are no doubt excellent ideas, many of the practices, by themselves, may not represent strong enough motivators for students to read, and some of the practices have significant drawbacks. If answers to study questions are not collected and evaluated, students will take much less care with them. Assigning reading summaries for extra credit could inadvertently send the message that the kind of careful reading a summary requires goes above and beyond the class' standard expectations. Asking students to complete online quizzes outside of the classroom requires students to access additional technology, and instructors are constrained to evaluating answers right before class meetings. Even though testing students on reading not covered in class sounds similar to quizzing, students may presume that they only have to read assigned texts carefully before an exam rather than consistently throughout the semester and before each class discussion. However, the aim of this paper is not to dismiss the above practices for improving student reading, but to consider seriously the merits of using reading quizzes in the classroom.

Using Reading Quizzes

The following is an account of how I use reading quizzes in my introductory and upper-level undergraduate philosophy courses, of roughly 35 students in size, at an American public university. While frequent quizzing may not be as practical for large lecture classes, it is possible that the procedure could be revised to be useful in such a setting (e.g., with the help of clickers or other technologies). Further, reading quizzes are not specific to the discipline of philosophy; quizzes could find fruitful application in any course where reading outside of the classroom is an important activity.

On the first day of class, I explain to my students that reading philosophy is crucial to learning, writing, and doing philosophy. I communicate how important it is that every class member spends quality time with the reading before our meetings, and I devote class time to discuss strategies for reading assigned texts. In general, I underscore how important reading philosophy is for a philosophy class, and this stress is backed up by the reading quizzes.

I often give a quick quiz on the reading at the start of class. Quizzes typically consist of one or two brief questions on the reading. Some questions can be answered with a few terms (e.g., “Ross argued that there were seven basic categories for moral evaluation; identify three of these seven categories.”), while others require no more than one or two sentences (e.g., “The title of today’s paper was ‘Two Levels of Pluralism.’ What distinguishes second-level pluralism from first-level pluralism?”). Sometimes quizzes ask students to offer their own critical reflection on the day’s reading (e.g., “Discuss one possible weakness with Sturgeon’s response to Harman.”) or summarize the paper’s main points (e.g., “Referring to two specific details of today’s reading, clearly summarize the main conclusion of the paper.”). At other times, students complete quizzes in pairs or in groups. Some quizzes are open-book. I even assign a handful of take-home quizzes. There is not always a quiz each day, but they are frequent enough that students expect a quiz during most meetings. Make-up quizzes are not permitted, but students’ two lowest quiz scores are dropped by the semester’s end. The semester also begins with several non-graded, non-collected practice quizzes to help prepare students and reduce apprehension about the procedure.

In my introductory courses, quiz scores make up 20% of a student’s final grade. In an upper-level course, quizzes count for slightly less (i.e., 15%). These percentages are significant enough to demand a student’s attention, and final grades partly reflect one’s performance reading and writing about what one has read.

While students can exhibit some stress about taking the quizzes at the very start of the semester, this anxiety seems to disappear as students get used to the practice of answering reading questions in class and, also, as students realize that they can do well on the questions. (See discussion of student self-reports of anxiety below.) While quiz scores are typically low for the first or second quiz, the scores markedly improve throughout the semester. The use of quizzes sometimes brings students to my office, asking for help on how to do a better job reading the assignments (presumably so as to do better on quizzes). Before I used reading quizzes, students did not come to see me with concerns about their reading skills.

Quizzes have additional benefits. The assignments encourage attendance without having to take attendance. Students make more of an effort to arrive at class on time, as quizzes typically occur at the class’ start. My comments on, and evaluations of, their quiz answers also offer students timely feedback on their reading skills and, to some extent, on their writing and critical thinking. At the start of class, students are usually looking over the reading. Many students are talking about the reading with one another. Students sometimes contact me before class to ask questions about what they have read. This dialogue is welcome. There is already a real engagement with the class’ material before the class even begins. Not surprisingly, since many students come to class already familiar with the text at hand, and having thought about the reading, class discussion is much more fruitful and lively. Participation in class discussion is valuable, as it can strengthen one’s confidence with the material, facilitate deeper understandings, and foster a more active learning environment. Having done the reading and being prepared to discuss it critically are important objectives for student learning.

Student Attitudes Toward Reading Quizzes

Student attitudes about reading quizzes were assessed through an end-of-semester anonymous survey. Surveys were administered in my introductory sophomore-level philosophy class, Introduction to Ethics ($n = 27$), and my advanced upper-level philosophy class, Ethical Theory ($n = 28$). The survey started with an open-ended item to solicit general opinions about the quizzes. Students then answered five questions about the quizzes using a 5-point scale ranging from 1 (*very negative*) to 5 (*very positive*), or from 1 (*none*) to 5 (*high*).

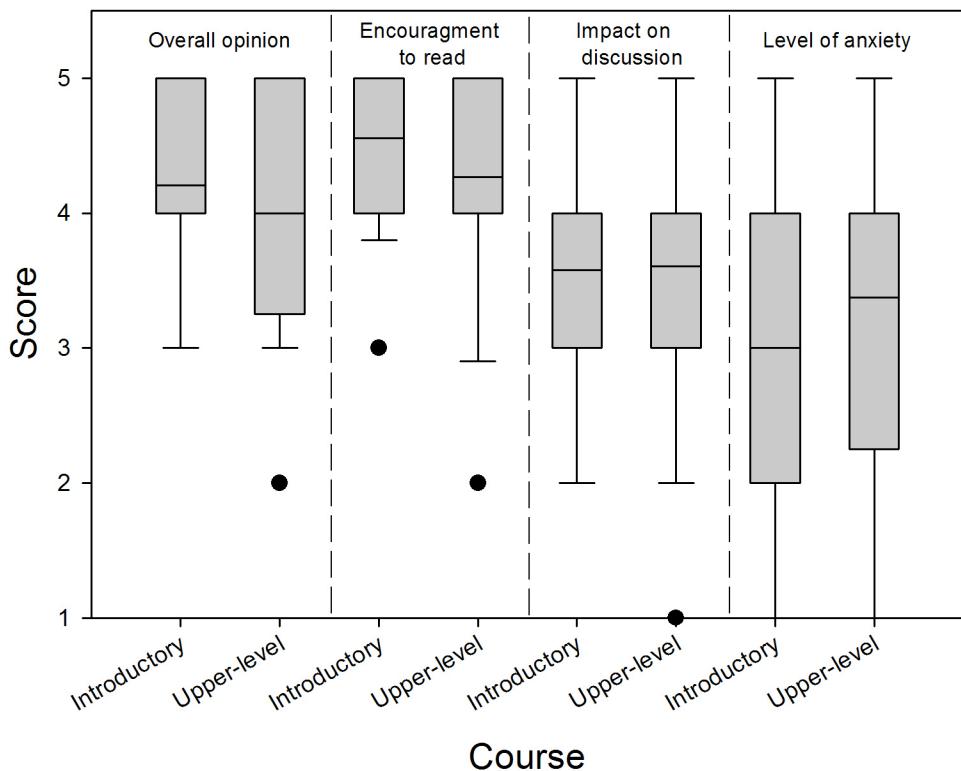
Responses to several survey questions are summarized in Table 1 and Figure 1. As Table 1 and Figure 1 indicate, students rated the quizzes favorably. A large majority of students surveyed (89%) reported a *very positive* (5) or *somewhat positive* (4) overall

Table 1
Summary of Survey Results

Question	Introductory course		Upper-level course	
	M	SD	M	SD
What is your overall opinion about the use of reading quizzes in the class?	4.2	0.7	4.0	0.8
What level of encouragement did the reading quizzes provide you to read the day's reading?	4.6	0.6	4.3	1.0
What impact did the reading quizzes have on your ability to engage in class discussions?	3.6	1.0	3.6	1.0
What level of anxiety about taking a quiz did you experience at the start of class?	3.0	1.4	3.4	1.3

Note. $n = 27 - 28$. For the first question, numerical scores 1 = *very negative*, 2 = *somewhat negative*, 3 = *neutral*, 4 = *somewhat positive*, and 5 = *very positive*. For the other three questions, 1 = *none*, 2 = *little*, 3 = *some*, 4 = *moderate*, and 5 = *high*.

Figure 1
Boxplots of Course Survey Data



Note. Boxes represent the range from the 25th to 75th percentile, whiskers indicate the 10th and 90th percentiles, lines indicate the mean values, and closed circles indicate outliers.

opinion of the quizzes. In the introductory course no one reported a negative opinion (1) or (2) of the quizzes, and in the upper-level course a single student reported a *somewhat negative* (2) opinion. When asked what level of encouragement the quizzes provided them to read the day's reading, 85% of students answered

high (5) or *moderate* (4). Students also perceived quizzes to have a positive impact on their ability to engage in class discussion.

The survey asked students to rate their level of anxiety about taking a quiz in class. Only 18% of students reported *high* (5) levels of anxiety. No

significant correlation was found between reported anxiety levels and overall opinions about the reading quizzes. One student included this comment next to the survey item about anxiety: "In the beginning high, but then low." This comment reflects my observation of student anxiousness over time.

Responses to the open-ended question, "In the space below, please offer any comments on the use of reading quizzes in this class," were generally positive. Responses such as the following were typical: "I actually enjoyed the quizzes. They provided additional motivation to complete the reading while not being so difficult as to cause anxiety"; "The fact of the matter is that generally students will not do the reading unless forced to which is a major problem for a discussion based class. I can't see how this class would function without the reading quizzes"; and, "At the time of the quizzes they didn't seem very appealing, but overall I would say they're helpful by motivating reading ahead, which contributed to class discussion since everyone is familiar with the text." Another student noted,

To be honest I really enjoyed having the reading quizzes. It caused me not only to *do* the readings but also to try and grasp what was said as opposed to just assuming I understood or waiting to hear in class about the main points of the readings.

Similarly, one student explained,

I like the quizzes a lot. It makes me do the reading even at times in the semester when there is a lot going on. Having all the reading done is really important for this class. So I was glad to have the extra incentive.

Thus, despite the unpleasantness of taking a quiz, students reported favorable attitudes about reading quizzes and associated benefits with having the quizzes assigned in class.

Objections to Reading Quizzes

Even though using reading quizzes has advantages, instructors are reluctant to employ this teaching method. This section considers several common objections to quizzing students on the reading and suggests that they are not as serious as they first appear.

A prominent argument against frequent quizzing is that such a practice fosters in students the wrong sort of motivation to learn and an undesirable, antagonistic attitude towards the professor. Lowman (1995) nicely captured this worry as follows. When outlining two general methods to encourage student reading, he described the unstructured, "laissez-faire approach" (Lowman, 1995, p. 230) whereby the professor simply

assumes that students will do outside reading and rarely refers to the reading in class. Lowman (1995) also observed the following:

At the other extreme of structure are instructors who have daily quizzes—or unannounced "pop" quizzes—on assigned reading. . . . Although these procedures are likely to produce more short-term compliance among students than are unstructured methods, they also often create student anxiety and an adversary relationship with instructors that color the orientation students bring to their learning. (p. 230)

Lowman advised instructors to find a middle ground. For him, "probably the best single option" (Lowman, 1995, p. 235) for motivating your students to do the reading is to refer to the reading explicitly in class. In courses that focus on texts assigned for class meetings, it is unlikely that a professor will not refer directly to the day's reading. For this reason, simply referring to the reading may not be enough to improve students' reading compliance.

Consider first Lowman's (1995) concern that quizzes foster a negative classroom atmosphere. Indeed, the use of quizzes might seem too intimidating for students. If almost every class started with a reading quiz, students could become quickly resentful and experience unnecessary anxiety at the start of class. Students might find the quizzes too demanding and complain that they are unfair. Constant quizzing could lead to an antagonistic relationship between the students and professor. As Burchfield and Sappington reported (2000), professors may be hesitant to penalize a student's grade for failing to do the reading "for fear of offending faculty colleagues, students, or both" (p. 60).

I shared these concerns the first semester that I used quizzes. Yet, rather than facing a class revolt, I found that students are grateful for quizzes. The survey results described above support my observations that students do not have a negative attitude about the quizzes. I have not yet had a student complain to me about the reading quizzes. While I do detect some tension during the first few quizzes, after the third quiz, students appear relaxed and ready. On the survey, several students commented that quiz questions were not too difficult if they were prepared. Student reports of anxiety levels were not overly high. For me, quizzes help set the atmosphere that I seek: one with the expectation that everyone comes to class prepared to engage with the material at hand. In their paper, "Ten Easy Ways to Engage Your Students," Gray and Madson's (2007) eighth suggestion to engage students was to quiz them daily. According to them, "Just the act of trying to get a correct answer changes the tone of the class. If you quiz at the beginning of the class, you will

arrive at class and find students studying together" (Gray & Madson, 2007, p. 85). They argued that holding students accountable daily is highly beneficial for both student learning and motivation.

If a reading is particularly challenging, one may object that it would be unfair to test students on it before it is discussed. This issue can be addressed. For example, I tell students that they should always be able answer the following question on a reading quiz: "What was the main conclusion of the reading, and how did the author support this position?" Also, I sometimes give students several specific questions on the reading, especially if the material is difficult. If a question is given to them beforehand as a reading question, students can expect to be able to answer it on a quiz. Such questions are also useful insofar as they guide students' reading and focus their attention on key points of relevance, points that will be centrally discussed in the upcoming class.

Contrary to Lowman's (1995) prediction, I have not detected that the quizzes foster student-professor animosity. My own view is that the degree to which students feel adversarial towards their professor depends on a number of other factors about the course, the teacher, and the student—factors that do not turn on the implementation or non-implementation of quizzes. Also, over time, the quizzing becomes more of a daily practice of responding to a posed question about the day's material and less like an examination or test. The quizzes are not a surprise, and they are so frequent that they do not function as traditional pop quizzes.

Lowman's (1995) other concern was that quizzes provide the wrong sort of motivation to learn. We want to encourage students to read for learning's sake. Reading merely to avoid a poor quiz score appears inimical to this aim. Lowman (1995) argued, "using grades to motivate compliance with routine homework or reading assignments has the unintended side effect of orienting students more toward the external grades they receive than toward internal intellectual satisfactions" (p. 231). These internal motives are important, as they are more effective and long-lasting than are external ones. Lowman (1995) and others have described the learning-oriented student as one who finds intrinsic value in the classroom experience, as well as personal significance and satisfaction in learning course material (Lowman, 1990; Milton, Pollio, & Eison, 1986). By contrast, the grade-oriented student is motivated by the extrinsic reward or punishment of grades and views classroom activities in terms of their implications for course grades (Milton et al., 1986). While Lowman (1990) admitted that using extrinsic motivators may represent a more powerful quick fix to prevent certain undesirable behaviors, the problem is that you must continually use the extrinsic motivator to ensure the result. But perhaps more importantly, Lowman (1990)

suggested that being extrinsically motivated in fact decreases one's intrinsic motivational structure (see also Deci, Koestner, & Ryan, 1999). This is worrisome, as experiencing the intrinsic rewards of studying the subject is important to one's learning and engagement in class. In support of this later claim, Milton et al. (1986) reported that learning-oriented students scored significantly higher on the Survey of Study Habits and Attitudes and exhibited high levels of participation and collaboration. Vansteenkiste, Simons, Lens, Sheldon, and Deci (2004) also found that being motivated by intrinsic goals had a positive effect on students' learning and educational performance.

Using quizzes might unintentionally foster a grade-oriented motive to read rather than the more desirable learning-oriented motive to do so. According to Milton et al. (1986), the following descriptions characterize a grade-oriented professor: "Use frequent tests, and possibly surprise quizzes, strictly to enforce student reading. Believe that students will not attend class regularly without coercion such as penalizing absences. . . . Use elaborate point systems to monitor or reward student work" (p. 145-146). Research also suggests that instructors who adopt a controlling attitude in the classroom, rather than an autonomy-supportive one, negatively affect students' educational performance and intrinsic motivation to learn (Reeve, 2009; Ryan & Deci, 2000; Vansteenkiste et al., 2004). The objection to daily quizzing, then, is that it promotes grade-oriented students and diminishes desirable learning-oriented motives. Starcher and Proffitt (2011) rejected using reading quizzes on similar grounds. They asserted the following:

It is difficult to see how threatening students with embarrassment in front of their peers if they don't answer a discussion question, or forcing them to read the text so that they can pass a quiz consisting of ten multiple choice questions, will instill this [important] love of learning. (Starcher & Proffitt, 2011, p. 404)

In reply, it is not clear that reading quizzes harm students' learning-oriented motives. The practice of quizzes could positively affect one's intrinsic motive to read. To the extent that quizzes help improve one's reading skills, reading will become less frustrating, as well as more enjoyable, rewarding, and stimulating. Once students are able to see a real connection between the day's reading and classroom discussion, difficult texts can become less foreign and more accessible. Quizzes can also provide immediate feedback on how well one has read the material. As Concepción (2004) argued, the metacognitive activity of thinking about one's reading practices and performance is an important step to growth as a reader.

Each semester, I meet with several students who report that they did the reading but performed poorly on quizzes. This opens the door to a conversation about good reading practices and possible reading strategies. If students do not regularly engage in the act of reading and do not monitor their progress in this area, it is hard to see how their reading skills could improve measurably. Unlike Lowman (1995), I am not opposed to using some apparently external motivators to encourage students to practice reading outside the classroom.

Finally, one might not object to quizzes on pedagogical grounds, but instead for the reason that they would be unduly time consuming to implement. Giving so many quizzes might take up invaluable class time. However, once classes get into the habit of taking quizzes, the entire procedure takes no more than 5 minutes. In addition, the process of writing a brief quiz answer can be a useful way for students to transition to discussing the material. Also, quizzes need not be given during every class.

Perhaps more objectionable is the amount of time that it would take to both write questions and grade responses. It is true that one has to devote some time devising and marking the assignments, but the task need not be onerous. In my own case, the small additional time spent putting the quizzes in place is worth the tangible benefits for my class discussions and students' success. With a bit of practice and some trial and error, it becomes easier to design effective quiz questions that are fast to grade.

Additional Suggestions for Implementing Quizzes

For readers interested in using reading quizzes in their courses, this section contains additional suggestions for their implementation. Regarding grading, I evaluate quizzes on a 5-point scale and give zeros to incorrect or missing responses. If answers are partly correct, but are difficult to understand or are otherwise faulty, they receive 1, 2, or 3 points out of five. I award 4 points to answers that are on the right track, but are unclear or somewhat inaccurate. Students appreciate the possibility to earn partial credit on quizzes. This reduces some of the pressure associated with taking a quiz, as success is not an all-or-nothing matter. Still, it is important, in my experience, not to be overly generous when marking quizzes, as some students will make up answers without having done the reading and hope that they will receive points for merely sitting the quiz. I typically give no credit to answers that display little or no familiarity with the reading.

Some students are also apt to skim the first and last pages of the reading and construct answers on that basis. Hence, it is a good idea to write quiz questions

that speak to central points of the reading, points that would be difficult to reproduce by a lucky guess or cursory glance at the opening paragraph. Finally, if a class performs particularly poorly on a quiz, instructors can always drop the quiz score or offer an opportunity for make-up credit.

As is the case when constructing any exam question or paper prompt for the first time, some newly written quiz questions will be more successful than others. Every so often, students misconstrue the question or find it easy to answer correctly with a guess. For these reasons, I keep a running log of which quiz questions are in need of revision for the future and why. I also maintain a record how each quiz question was graded, noting how many points were deducted for which sorts of answers. This makes grading easier in subsequent semesters.

In class, I go over the answers to quizzes immediately after they are collected and solicit sample responses from students. In this way, students can see how their peers have answered while receiving timely feedback on their own responses. Sometimes I ask students to trade quiz papers and comment on each other's work. This is especially effective when students have been asked to evaluate an aspect of the day's reading, and it can also facilitate a productive class discussion.

Conclusion

It is too easy for students to skip the reading, and when they do, their engagement and overall learning suffers. Of all of the suggestions to encourage students to read, reading quizzes are frequently dismissed as impractical and overly harsh. The professor who quizzes on the reading is often cited as an example of the adversarial and controlling professor who wields his or her power over grades to coerce student compliance. Despite the arguments to the contrary, I have had success using quizzes in my classes. Even though quizzes require extra work from students, survey results indicate that students had a positive opinion of the teaching technique. Quizzes make it clear to students that they are expected to read before each class. Students' performance on reading quizzes offers them some immediate feedback on their reading skills, and to some extent, on their writing abilities. Reading quizzes also encourage students to prepare carefully for the class meeting, and as such, students are more likely to participate in class discussion and understand the day's material. Unfortunately, critics of reading quizzes are often under a misconception about how students would react to them, and many of the reservations about using quizzes are unfounded. Given their potential benefits, reading quizzes merit serious consideration as an effective tool in the college classroom.

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