

I. Introduction

In this paper, I will argue for the use of Socratic dialogue outside of the classroom as a form of individual learning and assessment. In the past, using one-on-one Socratic dialogue outside of the classroom was prohibitively burdensome for the instructor. However, given the widespread availability and use of electronic forms of communication, conducting one-on-one conversations outside of class has become more feasible. This presents philosophy instructors with an opportunity to employ what I take to be a highly effective pedagogical tool in contexts outside of classroom discussion.

Section II of the paper will be a brief description of what Socratic dialogue is, and how modern technology opens up the possibility for its use outside of the classroom. Section III argues for the pedagogical value of Socratic dialogue as a form of student assessment. Section IV discusses how Socratic dialogue can be implemented in a variety of philosophy courses. In particular, this section addresses many of the questions that may arise when considering how to implement Socratic dialogue in any particular course.

II. What is Socratic Dialogue?

Socratic dialogue refers to a kind of conversation. Roughly speaking, an individual, the inquirer, begins the dialogue by asking a question, usually one that is broad or philosophical in character. After the respondent answers the question, the inquirer proceeds to ask further questions that tease out the implications of the respondent's answer. The most well-known cases of Socratic dialogue are in Plato's writings, where we find the eponymous character engaged in a variety of instances of

this kind of conversation. An example of such a conversation is *Euthyphro*, where Socrates asks Euthyphro, "What is piety?" In this dialogue, we see how Socrates takes Euthyphro's various answers to this question and begins to explore the consequences of each answer. Ultimately, every answer given either leads to some outcome that Euthyphro agrees must be rejected, or circles back to some previously rejected answer.

Taken out of this literary context, Socratic dialogue can generally be understood as an investigation of the conceptual and logical entailments of one's beliefs. Such an investigation needn't necessarily be antagonistic in character. That is, the goal of such a dialogue needn't be to demonstrate the "wise" to be foolish by showing their beliefs to rest on absurdities. Socratic dialogue can also be a useful pedagogical tool. By asking the right kinds of questions, a teacher can assist a student in learning for herself how her ideas are interrelated, and whether her beliefs are consistent.¹

The use of Socratic dialogue seems fairly widespread in many philosophy classrooms. While it seems standard procedure to conduct classroom discussions using Socratic dialogue, its use seems confined to such settings.² When it comes to learning outside of the classroom, most instructors rely on students to read the relevant material, review their lecture notes, or perhaps watch some videos. When it comes to assessment, most instructors use some combination of quizzes, tests, or papers. My suspicion is that most instructors would agree that Socratic dialogue is a very effective pedagogical tool for the teaching of philosophy. However, I also suspect that the reason why instructors don't use Socratic dialogue outside of the classroom is that they believe it to be infeasible from a practical standpoint.

Modern technology has significantly mitigated this concern. Digital communication, i.e. email, SMS, web chat software, or various social media platforms, give us the means to be able to conduct one-on-one conversations that are not constrained to a time or place. Assuming that you have the right tools, digital communication can occur anywhere there is wired or wireless internet access. Furthermore, unlike traditional snail mail, messages and replies are received nearly instantaneously after they are sent. This state of affairs opens up the possibility of using Socratic dialogue both as a one-on-one teaching tool and as a means of assessment.

If you count yourself as one of those whom I suspected as agreeing to the pedagogical value of Socratic dialogue, but you also had concerns regarding its implementation outside of the classroom, then skip ahead to section four, where I talk about how one could implement Socratic dialogue via digital communication. If you are interested, but also skeptical about the pedagogical merits of Socratic dialogue outside of the classroom, then continue to the next section.

III. Why Use Socratic Dialogue?

Nearly all of the literature that I have come across about Socratic dialogue conceives of it as exclusively a classroom activity.³ While it seems that there is widespread consensus regarding the value of Socratic dialogue in the classroom, there doesn't seem to be much of an opinion regarding Socratic dialogue as a form of teaching and assessment outside of the classroom. One might accept the value of Socratic dialogue inside the classroom, but be skeptical of its utility outside of the

classroom. Why think that Socratic dialogue is a tool worth employing over other forms of assessment outside of the classroom?

A major reason why one might find value in Socratic dialogue outside of the classroom is that it is a form of learning-based assessment. Learning-based assessment is a form of assessment that Ken Bain argues for in his book, *What The Best College Teachers Do*.⁴ According to Bain, learning-based assessment is contrasted with performance-based assessment. The difference between the two comes down to the function or role that the assessment ends up playing. Bain notes that for performance-based assessment, "a grade emerges from how well students perform the required tasks within the dictates of the course."⁵ It is important to note that for performance-based assessment, what is essential is that the student complete the tasks in a satisfactory manner. It is not essential that the student actually learns anything. For example, a student who crams and successfully retrieves the appropriate information during an exam will be assessed well according to performance-based assessment, even if she forgets all of the information a week later.

Learning-based assessment makes learning essential to assessment. According to Bain, implementing learning-based assessment requires that one ask what he calls the fundamental assessment question: "What kind of intellectual and personal development do I want my students to enjoy in this class, and what evidence might I collect about the nature and progress of their development?"⁶ Bain also points out that this question relies on several important assumptions. The first is that learning is understood as a developmental process rather than mere acquisition.⁷ While acquisition of information can also be considered a process, what I take Bain to mean

by this statement is that a developmental process involves some positive change in ability in addition to any acquisition of information. The second assumption is that grading assessment is not understood as a means to rank student performance, but rather as a means to communicate. The communication here is not merely "you did well," or "you did poorly." Rather, the communication that occurs involves further teaching and learning.

An important upshot here is that performance and learning can come apart. Just because a student performs well in a class does not necessarily imply that she learned anything relevant to the course. The previously mentioned case of cramming is an example of this. Likewise, a student could have learned a great deal that was relevant to the course, but still could have performed poorly. Bain gives the example of late penalties.⁸ A student could have learned much by writing a paper, but still could have performed poorly in the class because he turned the paper in too late.

While performance and learning can come apart, they are certainly not mutually exclusive. Instructors can and often do use performance as incentives (negative or positive) for students to learn. For example, it is fairly common practice in philosophy classes for instructors to employ some kinds of reading comprehension quizzes that are part of the students' grades. Students might care about their performance on these quizzes, since these quizzes will affect their grade. From the point of view of the instructor, however, the function of these quizzes is not to differentiate between good and bad students, but rather to provide an incentive for students to read course material outside of the classroom. The problem occurs when performance ceases to be instrumental to learning. This can happen when instructors use assessments without

giving much thought as to how those assessments are to contribute to learning. This happened to me during my early years as a philosophy instructor. When I first started designing my courses, my reasoning for using the assessments that I did was just that everyone else was doing the same. I didn't give any thought to how the assessments were to promote learning. I simply copied and pasted test questions and paper rubrics from colleagues that let me use their teaching material. Because I gave very little thought to how assessments actually contributed to the learning of philosophy, my assessments became performance-based assessments. They were used primarily to distinguish between A through F students. Any contribution to learning was for the most part accidental.

It seems to be the case that whether or not assessment is learning or performance-based depends in large part on how the instructor uses the assessment as part of her design of the course. As such, no form of assessment is purely learning or performance-based in itself. Any form of assessment, whether it be examinations, papers, projects, etc., can be learning-based if the instructor appropriately designs them and implements them into her course design. With that said, I would now like to argue that Socratic dialogue, in virtue of its mechanics, is particularly suited towards learning-based assessment.

In order to see how Socratic dialogue is particularly suited for learning-based assessment, we must first revisit two assumptions Bain notes as undergirding learning-based assessment. The first is that learning is a developmental process, and the second is that grading is understood as a form of communication. If one accepts these two claims as constitutive of learning, then the Socratic dialogue, by virtue of its inherent

mechanics, is well suited to contribute to and assess learning goals in philosophy. I'll begin with the second assumption. If grading is indeed a form of substantive communication between teacher and student, then Socratic dialogue is well suited as a form of learning-based assessment, since the very essence of a Socratic dialogue is communication between teacher and student. If we construe grading very broadly, so that grading is not just assigning numeric values to student work, but instead understood as any kind of feedback given by the teacher with the purpose of either instructing or correcting, then grading in Socratic dialogue occurs each time an instructor interacts with the student during the dialogue.

Given the nature of Socratic dialogue, assessment is always communicative. An instructor assesses the student's answers and follows up with further feedback. This feedback presents an opportunity for both further teaching and learning. There is another feature inherent in Socratic dialogue that fits nicely with the first assumption of learning-based assessment. Recall that the first assumption was that learning is understood as a developmental process rather than mere acquisition. The term 'process' implies that learning occurs gradually over time through a series of repeated efforts. This also describes the essence of Socratic dialogue. Socratic dialogue, by virtue of being a series of questions and answers over time, is also a process that is designed to facilitate learning. This is an interactive process where teaching and assessment can occur more or less simultaneously.

What I've argued for so far is that Socratic dialogue satisfies two underlying assumptions of learning-based assessment. First, learning is a developmental process. Socratic dialogue is an assessment that is process based. It occurs over a series of

questions and answers. Second, grading is a form of communication. Socratic dialogue, by its very nature, is a communicative form of assessment. Each time an instructor assesses a student's response, there is an opportunity for further teaching when the instructor replies.

Along with these observations, there are other related pedagogical advantages to using Socratic dialogue outside of the classroom. The first advantage has to do with feedback. Feedback has been recognized as playing a significant role in the learning process.⁹ Moreover, assuming that the quality of the feedback is good and that the feedback is contextually appropriate, immediate targeted feedback is generally better for learning than delayed feedback.¹⁰ Socratic dialogue, due to its communicative mechanic between teacher and student, is well suited for providing feedback. Furthermore, feedback can be both timely and targeted. Feedback is timely since a student doesn't have to wait until a midterm exam before realizing that she really doesn't understand the material. If a student demonstrates confusion or lack of understanding in a dialogue, then the instructor can provide correction in a more timely manner through the dialogue. The dialogue allows the instructor the flexibility for more targeted feedback. Feedback does not necessarily mean that the instructor provides the correct answer in response to a student's misunderstanding. In a Socratic dialogue, an instructor can provide feedback that helps a student think through her confusion by asking the appropriate follow up questions.

As an example of targeted feedback, one way in which I use Socratic dialogues is to teach students how to perform a conceptual analysis. Students are required to analyze concepts like happiness. When students send me their analyses, I am able to

assess how well they understand how conceptual analysis works. My feedback is then targeted towards what I take to be potential misunderstandings. For instance, it is common for students to confuse necessary and sufficient conditions. If I suspect that a student is giving sufficient conditions rather than necessary conditions, then I will provide feedback that requires the student to think through the difference between the two.

This ability to provide targeted feedback highlights another advantage of Socratic dialogue. Socratic dialogue is customizable to each student. Students will have different perspectives and different levels of ability. An instructor can alter the sorts of questions she asks to each student to match their level of understanding. If a student has difficulty with the material, then the instructor can alter her questions in the dialogue to make them more rudimentary and foundational. If a student is more advanced, then the instructor can pose more challenging questions. Being able to alter the level of difficulty for each student means that a dialogue can be challenging, but not too challenging. Setting the appropriate level of challenge can aid student motivation.¹¹ Assessments that are too challenging can discourage students and reduce motivation. At the other end of the spectrum, assessments that are not challenging enough can bore students and also reduce motivation. However, what is neither too challenging nor too easy will vary from student to student. Socratic dialogue is uniquely poised to be able to provide the appropriate amount of challenge due to its flexible nature.

Not only do students vary with their level of ability, they also vary with respect to the course material that they understand. Some students may have an easier time understanding moral relativism, but struggle with Kantian ethics. For others, it may be

the other way around. Socratic dialogue provides the flexibility for instructors to hone in on areas where a particular student is struggling, and force the student to work through that material. This kind of flexibility and customizability allows Socratic dialogue to behave in a manner similar to a surgeon's scalpel. An instructor can use Socratic dialogue to identify a student's areas of difficulty, and use the dialogue to help the student practice and gain mastery or understanding in those areas.

Another way in which I use Socratic dialogue is to assess students' understanding of the issues involved in personal identity. When I conduct this dialogue, some students have difficulty understanding what exactly identity amounts to. They often confuse identity with perfect similarity, and so believe that you can have two things that are strictly identical. Other students demonstrate a solid grasp of identity and can see how identity places constraints on theories of personal identity. In my dialogue assignments, my responses will differ depending on what group the student is in. If the student is in the first group (i.e. difficulty understanding identity), then I will provide feedback that pertains to the basics of understanding identity. If the student is in the second group, then I will provide feedback where the student thinks through implications of particular views. For example, a student who demonstrates understanding of identity might endorse psychological continuity theory. In that case I might press her on the fission problem.

This kind of flexibility and customization allows for the opportunity for instructors to use Socratic dialogue as a kind of scaffolding for students to help them learn to write philosophical papers. Roughly speaking, scaffolding in pedagogy refers to the various kinds of support that an instructor gives to a student in order to help reach learning

goals. Many students come to a philosophy class with little to no background in writing papers, much less writing philosophical papers. An instructor can use Socratic dialogue to guide a student through the process of writing a paper. For example, if an instructor wants her student to learn to write standard expository and criticism papers, then she can use the Socratic dialogue to guide her students step by step, first by asking her students to identify central claims, then moving on to identifying arguments given in support of the central claim, and then finally having students consider the plausibility of the premises given in the aforementioned arguments. Socratic dialogue can serve as a way for students to write papers step-by-step, so that the process is not so overwhelming. In this way, Socratic dialogue can serve as a form of pedagogical scaffolding. (See Appendix C for an example of how this kind of dialogue could work.)

IV. How do you use Socratic Dialogue?

At its core, Socratic dialogue is simply a series of questions and answers. Strictly speaking, an exam can be understood as a “Socratic dialogue” that has just one set of questions and answers. Given that Socratic dialogue is at its essence just a series of questions and answers, there is an enormous amount of flexibility as to how it can be implemented. That said, there might still be some uncertainty as to how one can implement Socratic dialogue as a form of assessment outside of the classroom. In this section, I will answer some of the more common questions on how Socratic dialogue is used in a typical course. The reader is also encouraged to examine my current rubric (found in Appendix A), as well as a sample dialogue (found in Appendix B).

A. What sorts of media do I use for Socratic dialogue?

So far, I've used email for Socratic dialogue assignments. However, using Socratic dialogue is certainly not restricted to email. Any kind of media where individuals can participate in back and forth conversation can be suitable for Socratic dialogue. Aside from email, this could include discussion forums, social media, Skype or other video conferencing, applications like Slack, or etc. There are pros and cons for each kind of media, and whether or not a form of media will be pedagogically effective will depend in part on the instructor's goals for the dialogue. At least for me, the implementation of Socratic dialogue is inchoate. There is a lot of experimentation to be done before I have a better sense of what works and what doesn't. I hope that instructors who are convinced of the potential of this assessment method can further experiment with the uses of different media and their effects on learning outcomes.

B. How are dialogues graded?

My current approach is to grade dialogues as pass/fail. Each dialogue is worth ten points. Students must give replies within a set time frame. Late replies incur a penalty of lost points. Once a dialogue is complete, the student receives full credit minus any late penalties. If a dialogue is not complete by the end of the course, the student fails and receives no credit.

This, of course, isn't the only way to grade dialogues. Dialogues can certainly be assessed with the traditional letter grade format. There are many possible ways to assign letter grades to dialogues. I will offer a few suggestions here. The reader is certainly encouraged to experiment with other ways to grade dialogues.

One possible way to grade dialogues would be to grade the quality of each response given by the student, and then to assign a final grade to the dialogue that

would be either the sum or average of the grades assigned to each response. This might be effective in conjunction with a dialogue format where there the instructor has set some finite number of exchanges. Another possible grading format would be to have the student write a summary of the dialogue after it is complete. The dialogue itself would not be graded. Instead, the instructor would grade the summary based on whatever sorts of considerations might be relevant for good paper writing. (See Appendix C for a sample rubric of this kind of dialogue assignment.) Thirdly, dialogues might take the form of an extended exam, where the student is given full credit for satisfactorily answering the question on the first attempt, but given successively less credit after more exchanges. Because grading dialogues can be done in a manner that is similar to exam or paper grading, one can transition to using them rather smoothly.

C. How do you determine when a dialogue ends?

There are several ways to conclude dialogues. One way to conclude dialogues is to impose some kind of pre-established end point. This end point can come in the form of a calendar deadline. A dialogue can begin on a certain date and then end, say, two weeks later. A second way is to end the dialogue after some number of exchanges. For instance, an instructor can stipulate that a dialogue will end after the student has replied ten times. Another way to end a dialogue is to continue until the student has demonstrated some level of proficiency or understanding that the instructor has deemed sufficient. This third way has been my current approach with dialogues. A dialogue with a student continues until they've adequately performed conceptual analyses on key terms, resolved any contradictions, and provided explanatory connections between the content of this dialogue and content from previous dialogues.

There is a tradeoff between pedagogical effectiveness of the latter method and the relatively lighter workload of the former method when considering these two approaches. Perhaps some middle ground can be found after further experimentation.

D. How can Socratic dialogues satisfy writing requirements?

In some institutions, introductory philosophy courses satisfy writing requirements. What these requirements are will vary from school to school, but they generally involve some sort of length requirements with respect to writing assignments.

Dialogues can satisfy writing requirements in several different ways, depending on how one implements them. If an instructor decides to grade the quality of each response given by a student, then part of the grading rubric can include expectations that are typical of paper writing, such as spelling, grammar, style, and so on. Another possible option that I mentioned previously would be for instructors to be lax with respect to writing standards when it comes to the actual dialogue, but then have students write a summary of the dialogue that would itself be evaluated at least partly on the basis of whatever writing standards are set by the instructor.

E. What is the workload like for an instructor who uses Socratic dialogue?

Every form of assessment will demand something of the instructor's time and energy. Ideally, every instructor would want to use a form of assessment that is maximally effective while requiring little to no effort from the instructor. Such a form of assessment does not exist. As such, every instructor must consider how much time and energy they are willing and able to invest in assessing students, and then consider which kind of assessment maximizes positive learning outcomes given the workload threshold that the instructor sets.

By my estimation, the instructor workload for Socratic dialogues is greater than examinations, but less than grading multiple drafts of long papers. The intensity of the workload will vary depending on how one decides to implement dialogues given the abovementioned considerations regarding how they end and how they are graded. For instance, an instructor can implement a Socratic dialogue that is a short series of predetermined questions. The instructor could then assign a grade to the dialogue that is based on the quality of the responses. This shorter, template style of Socratic dialogue could work better in larger classes. Alternatively, an instructor can conduct more open-ended dialogues, where questions will vary depending on students' responses. Additionally, such dialogues might vary in length depending on how well or poorly the student is learning the course content.

I've implemented the latter kind of dialogue while teaching a 6/5 load over the 2016/2017 academic year. I used Socratic dialogue in 10 out of the 11 classes that I taught that year. Despite the large course load, I have found Socratic dialogue to be far less onerous than administering and grading exams or papers. One reason for this was that it was far easier for me to identify and address a student's line of reasoning using Socratic dialogue. Grading papers and exams can often require an instructor to sift through a significant amount of irrelevant content in search of anything that is philosophically relevant. In general, I've found that Socratic dialogues were more effective at keeping the student focused on what was philosophically relevant, and thus made assessment easier.

F. What if I don't use email or any other kind of social media technology?

Unfortunately, digital communication is the very thing that allows for the feasibility of Socratic dialogue outside of the classroom. If for whatever reason an instructor does not use any form of digital communication, then this method will not be available to them. Without the use of digital communication, the only other way of feasibly implementing Socratic dialogue outside of the classroom is by meeting students individually and querying them in person.

Arranging multiple in-person meetings, while time and labor intensive, could still be a live option in order to use Socratic dialogue as a form of assessment. However, there are some pedagogical concerns to take into consideration when planning face-to-face meetings. Meeting with a professor face-to-face to talk about course material can be an intimidating experience for many students. As such, the experience of anxiety can get in the way of a student's demonstration of learning and understanding. Relatedly, meeting in-person places the student "on the spot" to answer questions immediately. Depending on what sorts of questions the instructor plans on using, it may be better for learning outcomes to allow students some time to think about questions before answering. As such, face-to-face dialogues may not be suited for certain types of questions.

G. Using email seems overly distracting for many instructors, since faculty are already inundated with email.

As I stated above, Socratic dialogue outside of the classroom is a very flexible form of assessment. There is nothing about this form of assessment that necessitates the use of email. All that is required is that there is some means by which an instructor can participate in back and forth communication outside of class. If it is too distracting

for an instructor to sift through student emails that are mixed in with other emails, then she can set up another email account that is devoted exclusively to Socratic dialogue. Doing so can alleviate potential disruptions that occur as a result of a greater influx of emails. The instructor can then check her dedicated email address at whatever time she allocates for herself to devote to engaging in dialogue. If using email in general is unattractive for an instructor, then she can set up a website discussion forum. If the idea of constantly having to check for responses is unappealing, then the instructor can set up Skype conferences to engage in real time Socratic dialogue (the instructor should take the concerns I mentioned in the previous subsection into consideration). The upshot here is that there are various ways to conduct Socratic dialogue, and the instructor can tailor the assessment to suit their pedagogical goals, as well as time and energy constraints.

H. I want my students to write papers. Is there any room for Socratic dialogue in my course?

While I have used Socratic dialogue as a primary form of assessment in my courses, it certainly needn't be the case that Socratic dialogue play such a role in every course. Socratic dialogue can be used as a more supplementary form of assessment, in a manner similar to how homework or quizzes are used in many courses. As such, there is no conflict between using both Socratic dialogue and assigning papers in any particular philosophy course. In fact, Socratic dialogue could be used as a way to prepare students for writing papers. I discussed this in general in Section 3. I also provide a particular way of doing this in Appendix C below, where a dialogue leads to the writing of a paper.

G. How would I implement Socratic dialogue in a large lecture course with several teaching assistants working under me?

So far, I've only used Socratic dialogue in courses where enrollment ranges from 15 to 35 students. In a large lecture course without any teaching assistants, the primary consideration on whether to incorporate Socratic dialogue would be workload. See my comments in sub-section E regarding Socratic dialogue and workload. In a large lecture course with teaching assistants, the main concern is likely to be unfamiliarity, since Socratic dialogue is a relatively novel form of assessment. An instructor that wants to use Socratic dialogue will probably have to teach their teaching assistants how to use it. The instructor will have to decide whether to provide a highly structured dialogue format, to give their teaching assistants a high degree of freedom in conducting the dialogues, or to choose some point in between. Factors that play into such a decision will include the assistants' teaching ability and experience, familiarity with the course content, consistency with respect to how the assistants grade, etc.

Teaching graduate assistants how to use Socratic dialogue will mean more work for the instructor. However, I think that this additional effort is worthwhile. Some may see assistantships as merely a paid position that alleviates the workload of a large lecture course instructor. I believe that the spirit of teaching assistantships to be one of mentorship between instructor and assistant. Teaching assistants generally receive little formal training on teaching outside of perhaps a one or two week orientation. Much of what they learn about teaching is done "on the job." Due to its interactive nature, Socratic dialogue offers an opportunity for assistants to improve their teaching ability. By using the dialogue, assistants can develop their ability to discern points of confusion

or difficulty that may be common among many students. Furthermore, by using the dialogue, assistants have the opportunity to learn how to address these confusions or misunderstandings at an individual level, thus improving their ability to teach to a student, rather than merely teaching to a classroom. Compare this with the more or less rote task of grading exams. It's harder to see how grading exams makes you a better teacher in any significant sense. I believe these sorts of considerations weigh heavily in favor of training assistants to use dialogues in large lecture classes.

V. Conclusion

Everyone who reads this paper probably already knew what Socratic dialogue was at the outset. Most would agree that Socratic dialogue has tremendous pedagogical value in philosophy. Digital communication allows us to communicate one-on-one with our students anytime and anywhere. This opens up the possibility of conducting Socratic dialogue with each individual student anytime and anywhere. Socratic dialogue is no longer constrained to classroom discussion. If you agreed that that an instructor should work towards implementing learning-based assessment over performance-based assessment, then I hope to have convinced you that Socratic dialogue is a natural fit with learning-based assessment, and thus worth your consideration as you design your courses. Socratic dialogue is simple, flexible, and easy to implement. There is plenty of room to improve Socratic dialogue and find more ways to apply it. I hope that many readers do just that, and consequently improve both how philosophy is taught to and perceived by students.

Appendix A: Dialogue Rubric for Introduction to Philosophy, Summer 2017

Each dialogue is worth 10 points, and is also worth 10% of your grade.

Here's how you complete these assignments.

1. Look below and you'll see a list of questions. Each question has a due date.
2. Email me your answer to a question before the end of the due date. If you miss the due date, you will lose 1 point. You will continue to lose 1 point for each day after until you send me an answer.
 - a. **This is not a paper!** Don't open a Word or Pages document. If I see an attachment in your email, I'm just going to reject it and tell you to redo it. Just write me an email with your answer to the question. **Your answer should not be longer than 3 sentences.**
3. Once you've answered the question, I will reply with at least one follow up question within 24 hours. You have 24 hours after I've replied to answer my follow up question. If you don't reply within 24 hours, then you'll lose points in the same way as mentioned above (i.e. 1 point for each day you're late).
4. After you've responded to my reply, I'll probably have more questions for you. We're going to go back and forth until we are finished with this conversation.
 - a. **Remember that each time that I reply, you have 24 hours to respond.**

How do you know when the dialogue is finished?

Here's what I'm looking for in these dialogues:

- Have you clarified all of the important terms?
 - I'm looking for your ability to analyze important concepts and to be clear with central terms and ideas.
- Have you provided good explanations?
 - After answering Question #1, your answers to the following questions should explain your answers to the previous questions. For example, your answer to the question, "What are human beings?" should explain your answer to the question, "What are the most valuable things to you?"
- Have you avoided contradictions?
 - Each answer builds on your previous answers. If there are contradictions in any of your answers, or between your answers, then I will let you know, and you will need to resolve them.

Once a dialogue is complete, you will be awarded 10 points minus any deductions if answers or replies are late.

Questions:**Question #1 (Due July 9)**

Where does all your money and your time go? Be as specific as you comfortably can. (Suggestion: Over a week, keep track of how you spend your time and how you spend your money.)

Your first response for this question can be more than 3 sentences.

Question #2 (Due July 16)

What are the most valuable things to you?

Question #3 (Due July 23)

What are human beings?

Question #4 (Due July 30)

Is reality completely natural, or does reality have a supernatural component?

Question #5 (Due August 13)

Once you have successfully completed all of the questions, your last assignment is to give a summary of your worldview. This will basically be a wrap up of your answers to your previous questions.

This "question" really isn't a question. Here you're basically writing me a short paper. Your first response for this question can be more than 3 sentences.

Appendix B: Sample Dialogue

In the following dialogue, the student was assessed on her understanding of free will and determinism.

Instructor: Explain to me what you think free will is.

Student: I think free will is the ability to choose between options one is given. However I've changed my stance on that and do not believe we have free will in the strictest sense of the word after our class discussion on it.

Instructor: Okay, so you would agree that free will requires the ability to choose between alternate possible options?

Student: Yes

Instructor: Okay, next explain determinism to me.

Student: Determinism is the idea that everything that happens is going to happen regardless of the actions of humans, and that the actions of humans and everything else in the universe are predetermined by what has occurred in the past, and thus can be predicted by science and formulas.

Instructor: How is everything predetermined, according to determinism?

Student: The conditions leading up to the occurrence of events leave no room for any options other than the event that occurs.

Instructor: How do the conditions leading up to occurrences leave no room for any other options?

Student: There are laws of nature that ensure that these occurrences are the only options.

Instructor: Okay good. Give me an example to illustrate how determinism works.

Student: So today I had oatmeal for breakfast. This was not a choice of my own, but rather an occurrence led up to by previous experiences starting from my mother feeding me oatmeal as a child to oatmeal being on sale at the grocery store yesterday.

Instructor: Okay good. Would you agree that determinism is true, and therefore that we have no free will?

Student: Yes, and any statements I made previously stating otherwise I would like to redact please.

Appendix C: Alternative Dialogue Rubric Using Letter Grades

This assignment has two phases. You must complete the first phase before proceeding to the second phase.

First Phase

This phase is the dialogue phase. You will answer questions during this phase. If your answers are not correct, then I will follow up with more questions, letting you know why they are incorrect.

1. Your first step is go to Blackboard and look under “Content.” There will be a list of articles. Select one and read it.
2. Once you’ve read the article, send me an email and answer the following question:
 - a. What is the author’s central claim?
 - b. If the answer to this question is correct, you will advance to the next question. If it is incorrect, I will let you know, and you will have to revise your answer until it is correct. You can answer as many times as necessary until you get the answer correct. Remember that you cannot advance until you answer this correctly.
3. The next question is this:
 - a. What is the main point of each section of the article, and how do they relate to the central claim?
 - b. The format here is the same as with the first question. You keep answering until you get it right.
4. Here’s the third and final question:
 - a. What is one argument that the author gives in defense of the central claim? Give the argument in a line-by-line premises/conclusion format.
 - b. Again, you keep answering this until you get it right.
5. If you’ve gone through these steps successfully, then you can proceed to the next phase.

The dialogue phase of this assignment will not be graded. However, you cannot do the second phase until you complete this phase.

Second Phase

For the second phase, you will write me a short paper (2-3 pages). This paper has two parts.

The first part of the paper is to summarize the article that you've been reading. Tell me what the author's central claim is and tell me what arguments the author gives in support of that claim.

The second part of the paper will be a criticism of the author's arguments. What are the reasons why someone might find the arguments unconvincing?

Here's how the paper will be graded. The paper is worth 100 points. The points break down as follows:

- 30 points for organization and structure: Is your paper easy to follow? Can I easily locate each of the main points of your summary and criticism?
- 20 points for spelling and grammar: Is your paper readable?
- 30 points for the summary portion of the paper: Does your paper accurately summarize the article you are writing about?
- 20 points for the critique portion of the paper: Does your critique show how well you understand the arguments? Is your critique convincing?

¹ See Boghossian (2002), Reid (2003), Shah (2008), and Mullis (2009) for various formulations and conceptions of the historic Socratic method and the Socratic method as applied in contemporary classrooms.

² There have been ideas given in the literature on how to use Socratic dialogue as a form of assessment outside of the classroom. See Coppenger (1979), Walker et al (2017), Daley (1983), L'Hote (2012), and Medeiros (2017). Among these contributions, only Medeiros discusses a form of assessment that involves interaction between instructor and student. None of the previously mentioned articles discusses the use of technology to facilitate this kind of student to teacher conversation.

³ Conducting a search using the term "Socratic" yielded 284 results in the journal *Teaching Philosophy*. After an initial perusal, only 5 out of the 284 dealt explicitly with the use of the Socratic method outside of the classroom. See endnote 2.

⁴ (2004). See pp. 152-154 for the relevant passages.

⁵ p. 152

⁶ *ibid.*

⁷ Compare the idea of acquisition to Paulo Freire's "banking model of education" in his (1970).

⁸ (2004), p. 153.

⁹ See Ambrose et al (2010) ch. 5, and Ericsson (2017) p. 99.

¹⁰ See Hattie and Timperley (2007).

¹¹ See Ambrose et al (2010) ch. 3.

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