

Comparing Student Learning in Traditional and Distance Courses of PHIL 101 *Introduction to Philosophy*

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Abstract

In this study, I compared both objective learning outcomes and student attitudes in the form of students' anticipated and perceived course satisfaction, learning, and results between students in traditional and distance sections of *PHIL 101: Introduction to Philosophy*. The hypothesis was that while objective learning outcomes would reveal no significant difference between students in the two types of classes, students in the traditional classes would have a better learning experience and perceive that they had learned more and learned better than students in the distance classes. Data was collected from students' performance on academic assignments and a Basic Knowledge Test and responses on two anonymous surveys. The data collected in the study showed that there was no significant difference in objective learning outcomes, that students in the traditional class enjoyed the lectures more than their counterparts in the distance sections, and that the traditional students tended to find the class, overall, more enjoyable than the distance students. However, the data do not support the hypothesis that students in the traditional classes would perceive that they had learned more or learned better. While there were some minor differences in what the students in the two types of classes anticipated from the course, by the end of the semester, there were relatively few differences between these two sets of students. If anything, the distance students seemed more confident that they had learned what philosophy is and how it is done than the students taking the traditional "on-ground" course. Moreover, traditional students were no more likely to believe that they would

take another philosophy course than the distance students and students in both sorts of classes felt they had not acquired the critical thinking skills they had anticipated acquiring.

Introduction

In the study conducted, I aimed to measure both actual and perceived learning outcomes between students in traditional and distance sections of Introduction to Philosophy. Many philosophers are skeptical about teaching philosophy in a distance format since they believe some essential aspect of doing philosophy, something not necessarily reflected in students' performance on exams, is lost in that medium. This *je ne sais quoi* is a very difficult thing to measure. It occurred to me that what one thinks of one's learning experience insofar as *that* one has in fact learned something is just as important as how one actually performs in the class. I did not focus on students' experience of using a particular technology, but instead on their experience of learning and doing philosophy. I focused on students expectations for the course at the beginning of the semester and their impressions of having satisfied these expectations at the end of the semester. There is some evidence that children who perceive themselves to be good decision makers actually make better decisions (Grier 1998). It is plausible that students of philosophy who believe they learned something about what philosophy is and how it is done and believe they have improved their critical thinking skills will go on to use these acquired skills more effectively. Moreover, over and above the intrinsic value that comes from believing that one has been successful, this sense of accomplishment coupled with students enjoying the content and delivery of the course could lead to a second course in philosophy—an appealing prospect in a department like ours looking to increase enrollments. Thus the guiding question behind the study was

Do (1) anticipated learning outcomes, (2) anticipated course satisfaction, (3) perceived learning outcomes, (4) perceived student satisfaction, (5) actual learning outcomes, and (6) retention of learned material differ between *Introduction to Philosophy* students who take a traditional “on ground” course and those who take a distance course?

The hypothesis was that while students in both courses would have comparable grades (consistent with the aforementioned “no significant difference” phenomenon), *students in the traditional course would perceive that they had learned better and be more satisfied with their learning experience by recognizing their accomplishments, than those who had completed the distance section of the course.* Very simply, I expected that the students who had the experience of coming to class, being involved in and observing classroom discussions, and hearing the lectures “live” would feel that they got more out of the class than those students who took the class online. This would show that, while there may be certain benefits of distance education generally speaking, there are also certain drawbacks that may be discipline-specific.

Methods

Participants

Demographic information, including age, class rank, gender, and race, was collected via CCU’s Office of Institutional Research for the 62 students who completed traditional classes and the 37 students who completed distance classes. Statistical analyses using the chi square (χ^2) test for independence indicated no significant difference between the traditional and distance sections in terms of gender and racial compositions. However, a significant relationship was found between course format and age, with the traditional classes having a higher percentage of students under the age of 24 than the distance classes. The average age of the students in the transitional classes was 19.6 (SD = 1.72) while the average age in the distance classes was 23.3 (SD = 7.51). Additionally a significant relationship was found between course format and

class rank. The percentage of freshman in the traditional classes (46.6%) was approximately 2.5 times greater than the percentage of freshman in the distance classes (18.9%).

Course Description

PHIL 101 *Introduction to Philosophy* satisfies a core (general education) requirement at CCU. The philosophy department offers 10-12 sections of the course each semester, and enrollment in each section is usually capped at 27 students. Data for this study was gathered over two semesters. In the fall of 2005, I taught one section of PHIL 101 as a distance course (D1), one section as a traditional but accelerated (8-weeks long) course (T1), and one traditional course (T2). In the spring of 2006, I taught one traditional section (T3) and one distance section (D2). I teach a traditional “problem-based” course focusing on five areas in Philosophy: logic, philosophy of religion, epistemology, philosophy of mind and ethics.

Materials

Exams and Assignments: Students in both types of courses completed five section tests, one every three weeks corresponding to the five topics, and a cumulative final on WebCT. They also completed two written assignments during the semester (either two 2-3-page papers or two take-home essay exams).

Surveys: Students were asked to complete an anonymous starting and ending survey consisting of 53 questions on WebCT during the first and last weeks of the semester, respectively. The following 16 questions were examined for this study. (Questions marked with an “*” are from the ending survey. Responses to question 38-45 were given on a Likert scale on which 1=strongly agree, 2=agree, 3=disagree, 4=strongly disagree.)

6*. Will you take another Philosophy course.

38. My only goal is to pass the class.

- 38*. I am satisfied with the grade I earned in this class.
39. I anticipate satisfying the learning goals/objectives in this course.
- 39*. I satisfied the learning goals/objectives in this course.
40. I intend to get a high grade in this class.
- 40*. The grade I earned in this course reflects the effort I put into the course.
41. I do not care what grade I earn as long as I learn something about philosophy.
- 41*. Despite the grade I earned, I learned something about philosophy.
42. I hope to earn a good grade and learn something about philosophy.
- 42*. I am satisfied with the grade I earned and I learned something about philosophy
43. I hope to engage in philosophical thinking myself in this course.
- 43*I engaged in philosophical thinking myself in this course.
44. I hope to engage in philosophical discussions in this course.
- 44*. I engaged in philosophical discussions in this course.
45. I expect that overall this class will be enjoyable.
- 45*. Overall, this class was enjoyable
46. I expect that the readings in this class will be interesting.
- 46*. The readings in this class were interesting.
47. I expect that the lectures in this class will be interesting.
- 47*. The lectures in this class were interesting.
48. I expect that the videos in this class will be interesting.
- 48*. The videos in this class were interesting.
49. I expect that the discussions (in class or on WebCT) will be interesting.
- 49*. The discussions (in class or on WebCT) were interesting
50. I will feel a sense of accomplishment upon completing this course.
- 50*. I feel a sense of accomplishment having completed this course.
51. My critical thinking skills will be improved upon completing this course.

51*. My critical thinking skills have improved having completed this course.

52. I will have a better understanding of what philosophy is upon completing this course.

52*. I have a better understanding of what philosophy is having completed this course.

53. I will have a better understanding of how philosophy is done upon completing this course.

53*. I have a better understanding of how philosophy is done having completed this course.

Basic Knowledge Test: Students completed a Basic Knowledge Test made up of 15 multiple-choice questions covering the main content of the courses at the start of the semester, at the end of the semester and two months after the semester ended on WebCT.

Procedure

(1) Anticipated learning outcomes and (2) anticipated course satisfaction were gauged using the starting survey. (3) Perceived learning outcomes and (4) perceived student satisfaction were gauged on the ending survey. (5) Actual learning outcomes were derived from performance on course requirements. (6) Retention of learned material was derived from performance on a Basic Knowledge Test administered two months after the semester had ended.

Results

Academic Performance

Table 1 presents students' mean academic performance on the eight assignments measured for the study. Grades on each assignment were recorded as a percentage based on a 100-point scale. The table gives the mean percentage score for each assignment, the standard deviation, and the number for both the traditional and distance sections of the course. The independent *t* test was used to compare the performance of students in each of the two course formats. There were no significant differences in mean scores on the first five assignments (the section tests) or

the two written assignments; however, the mean final exam score was significantly *higher* in the traditional sections than in the distance sections as indicated in the cells marked with an asterisk. The students in the traditional sections of the course scored 7.16% higher, on average, than students in distance sections of the course on this test. Still, there was no significant difference between the two course formats in mean percentage points on all graded assignments taken together.

Table 2: Mean Percentage Scores on Academic Work in the Traditional and Distance Classes

Assignment	Traditional Sections			Distance Sections			<i>t</i>
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	
Test 1: Logic	80.70	11.28	64	75.70	15.96	40	1.87
Test 2: God	70.98	13.98	64	71.89	16.69	35	-0.29
Test 3: Knowledge	69.87	13.16	57	64.53	13.91	34	1.83
Test 4: Mind	65.24	16.35	55	61.86	14.69	31	0.95
Test 5: Ethics	67.61	13.13	54	69.55	13.96	31	-0.64
Test 6: Final	74.04	10.76	44	66.88	14.52	24	2.31*
Paper 1	70.5	18.47	45	76.00	20.66	26	-1.16
Paper 2	85.18	18.28	28	87.73	6.94	22	-0.62
All Tests & Papers	72.37	15.33	411	71.28	16.62	243	0.85

* $p < .05$

Basic Knowledge Test

The Basic Knowledge Test was composed of fifteen multiple-choice questions about the material that would be covered in the course. Numbers in Table 2 represent the mean percentage of correct answers out of fifteen, the standard deviation and the number for each of the two course formats. The independent *t* test was used to compare mean performance on each Basic Knowledge Test administered between the traditional and distance sections of the course. Students in the traditional classes scored significantly higher (1.18 points) on the pretest than students in the distance courses. There was no significant difference in performance on the posttest or retention test between the two types of courses.

Table 3: Mean Scores on the Basic Knowledge Test in the Traditional and Distance Classes

	Traditional Sections			Distance Sections			<i>t</i>
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	
Pretest	3.18	2.89	50	2	1.95	34	2.079*
Posttest	9.11	2.72	37	7.96	3.02	23	1.526
Retention	7.36	2.74	14	6.75	2.06	4	0.41

* $p < .05$

Survey Results

Starting Survey There were significant differences in their expectations about how interesting various components of the course would be. Specifically, traditional students agreed less strongly that the course readings, video and discussion would be interesting. There were no significant differences in what students anticipated getting out of the course, the sorts of grades they expected to earn, their desire to engage in philosophical thought and discussions, their anticipated sense of accomplishment, critical thinking skills, knowledge of philosophy and philosophical methods to be acquired.

Ending Survey There was a significant difference in the mean responses to how enjoyable, overall, they found the class, and how enjoyable they thought the lectures were with students in the traditional classes enjoying both the lectures and the course more than the distance students. There was no significant difference between students' perceptions of their grades and satisfaction of course goals, their having engaged in philosophical thought and discussions, their sense of accomplishment, their understanding of philosophy and its methodology, or how interesting the course components were. Also, there was no significant difference in the percentage of students answering that they might take another philosophy course in the future.

Discussion

The hypothesis was that while having comparable grades, the students in the traditional classes would get more out of the learning experience than the distance students. The results of the study support the "no significant difference" research in that students in both types of classes had comparable grades. Insofar as the exams and papers were an effective means of measuring student learning, there was no significant difference between the traditional and distance students. However, the hypothesis was also that there is an essential aspect to student learning that comes from being in class, engaging in discussion and listening to lectures. While it is very difficult to measure this component of student learning, I attempted to gauge it by measuring students' responses to survey questions about what they expected from the course at the beginning of the semester and what their impressions of the course at the end of the semester. Contrary to the hypothesis, the traditional students did not report being more satisfied with the course and they actually perceived themselves to have learned less about what philosophy is and how it is done than the distance students.

The findings comparing the performance on graded assignments between the two course formats, for the most part, are consistent with the "no significant difference" research.

Insofar as these graded assignments are a true measure of student learning, there appears to be no significant difference in learning between the traditional and the distance students. The one difference noted in the findings was that the students in the traditional sections of the course scored 7.16% higher, on average, than students in distance sections of the course on this test. This difference is the result of final exam grades in just one of the two distance sections in which the average final grade was just 59% compared to 76% in the other distance section of the course. One possible explanation for this can be attributed to the fact that students were allowed to drop their lowest grade on any of these eight assignments. Given that the final was the last assignment, it may be that students not needing the final grade to improve their overall grade did not prepare for, complete, or put much thought into the final. A cursory examination of the students' grades for this particular section revealed that of the thirteen students who took the final, only six students needed to do so. And, of those students not needing to take the final, or taking it to attempt to raise their overall average, seven received a lower grade on their final than their average going into the final. Several of these students may have "given up" on the final once they realized it would not boost their overall grade. For example, one student with a 79% average going into the final earned a 37% on the final. Obviously this student did not make a sincere attempt to do well on the final. This explanation for the difference in final mean scores is supported by the fact that there was no significant difference in the overall mean scores on all assignments taken together. That is, while there seems to be a discrepancy between final exam scores between the traditional and distance sections of the course, this is not reflected in students overall performance (final grades).

The discrepancy between the two course formats on the Basic Knowledge Test was only in the mean pretest scores. Obviously, this is not the result of either of the course formats, though one might think that those students in the traditional sections of the course had some background in philosophy. The disparity among the means in the two course formats, however, can be attributed to the performance on the pretest by three individuals. One's significant other

took the same course from me in the previous semester, and I suspect that she completed the pretest for her partner. It is possible that the other two also got help completing the pretest since it is unlikely that they were familiar with the philosophical concepts on the test. Of these two students, one went on to earn a B+ in the course and the other withdrew after receiving a failing grade and academic warning for cheating on a written assignment.

The data revealed that there was very little difference in what students anticipated getting out of the course. There was no significant difference in the sorts of grades they expected to earn, in their desire to engage in philosophical thought and discussions, in their anticipated sense of accomplishment, critical thinking skills, knowledge of philosophy and philosophical methods that would be acquired by completing the course. However, there were significant differences in their expectations about how interesting various components of the course would be. While students in both the traditional and distance courses expressed the same expectations about the lectures being interesting (T=1.81 and D=1.78), the mean response for students in the traditional classes was significantly higher on those questions asking how interesting they expected the readings (T=2.17 and D=1.7), videos (T=2.08 and D=1.81), and discussions (T=2.01 and D=1.76) to be. Again, this could be attributed to students repeating the class who had previously failed the course. What is more likely though is that this can be attributed to the distance students being older and presumably more mature as well as being more realistic about their role in their learning experience and more invested in getting something out of the class.

As on the starting survey, there were very few differences in mean scores between the two course formats on the ending survey. Again, there was no significant difference between students' perceptions of their grades and satisfaction of course goals, their perception of having engaged in philosophical thought and discussions, their sense of accomplishment and their perceived understanding of philosophy and its methodology. Whereas the distance students had started out the semester anticipating the readings, videos and discussions to be interesting,

more so than the traditional students seemed to anticipate, at the end of the semester there was no significant difference in how interesting the students found these components of the course to be. There was a difference in the mean responses to how enjoyable, overall, they found the class to be (T=1.95 and D=2.47) and how enjoyable they thought the lectures were (T=1.72 and D=2.3). Thus the traditional students' mean response was solid within the "agree" range whereas the distance students were leaning towards "disagree" with regards to the overall enjoyableness of the course. And while 'lecture', at least for the traditional students, is ambiguous between the PowerPoint lectures available online to both the traditional and distance students and the "live" lectures given in class, we can assume that the traditional students found the in-class lectures much more enjoyable than the distance students found the online PowerPoint lectures. This supports the idea that there is some essential component to learning philosophy that takes place in the traditional classroom and that this instructor did not duplicate in the PowerPoint lectures prepared for her distance courses.

If there is some aspect to learning philosophy that goes beyond what is measurable on objective exams, and I believe there is, this study did not specifically reveal it. Instead, for the most part, the data collected tend to support the "no significant difference" research that, when coupled with arguments for distance education in general, seems to justify offering philosophy courses in a distance format. Moreover, in addition to looking for better, more revealing ways to measure student learning in philosophy courses in general, this study made it clear that this instructor needs to work to not only help students satisfy the course goals, but to help them recognize that they have satisfied these goals. Finally, this instructor needs to continue to look for more engaging methods for teaching philosophy to distance students.

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