

**A Hybrid Approach to Logic Instruction in Philosophy:  
Proposal for a Scholarship of Teaching & Learning Project**

Abstract

Recent studies including (Folley 2010, 93-100), (Jefferies and Hyde 2010, 133-140), and (Vernadakis et al. 2011, 188-199) suggest that blended instruction, which incorporates elements of online and traditional face-to-face instruction, can produce learning outcomes that are superior to those produced by traditional instructional methods alone. My proposed project will explore whether this general thesis holds true in the specific case of an upper-level symbolic logic course for a medium-sized audience of predominately philosophy majors.

The project will investigate whether it is possible to enhance student learning in an upper-level symbolic logic course by recording lectures for the course as audio lecture captures, assigning students to view the lectures online through a learning management system prior to class, and devoting 45 to 60 additional minutes of class time per week to working through logic problems collaboratively. Devoting additional time to collaborative problem-solving activities in class could help the weakest students to gain proficiency in applying problem-solving skills through repetition and could help the strongest students to attain even higher levels of mastery by allowing the instructor and the class to work through at least one advanced problem that would really challenge them in each class meeting.

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Statement of Purpose

The purpose of this scholarship of teaching and learning project is to determine whether hybrid instructional methods can achieve better learning outcomes than traditional instructional methods in an upper-level philosophy course in symbolic logic for a medium-sized audience of predominately philosophy majors. I have taught PHL 312 Symbolic Logic to an audience of 12 to 25 third- and fourth-year students, most of whom are philosophy majors, approximately once every four semesters since 1998. I have been generally pleased with the degree to which my students have fulfilled the course learning objectives for PHL 312, but I have become concerned that I am unable to help my weakest students to meet the course learning objectives or to enable enough of my strongest students to exceed the course learning objectives. In Fall Semester 2011, for instance, more than 20% of students failed to meet 2 of the 4 learning objectives for PHL 312. In the same offering of the course, no course learning objective was exceeded by 75% or more of my students. While at least 72% of my students met or exceeded each of the 4 learning objectives for PHL 312 in Fall Semester 2012, I believe that my students have the potential to achieve at a higher level.

In student evaluations of teaching for PHL 312, students regularly express the desire to spend more class time working through logic problems collaboratively. Until recently, my regular reply to these comments has been that students will not even be able to get started on the logic problems assigned as homework until I have covered the necessary problem-solving techniques in class lectures, which necessarily consume 45-60 minutes of class time each week. Teaching PHL 250 Philosophical Foundations for Ethical Understanding online in Summer Session 2012, however, introduced me to the technique of recording an audio lecture capture illustrated by slides. This led me to wonder whether I could enhance student learning in PHL 312 by recording my lectures for PHL 312 as audio lecture captures, assigning students to view the lectures online through BlueLine2 prior to class, and devoting 45-60 additional minutes of class time per week to working through logic problems collaboratively. Devoting additional class time to collaborative problem-solving activities could help my weakest students to improve their problem-solving skills through repetition and could help my strongest students to achieve even more by allowing me to work through at least one advanced problem that would really challenge them in each class meeting.

Recent studies including (Folley 2010, 93-100), (Jefferies and Hyde 2010, 133-140), and (Vernadakis et al. 2011, 188-199) suggest that blended instruction, which incorporates elements of online and traditional face-to-face instruction, can produce learning outcomes that are superior to those produced by traditional instructional methods alone. My proposed project will explore whether this general thesis holds true in the specific case of an upper-level symbolic logic course for a medium-sized audience of predominately philosophy majors. My project aims to create an enhanced, interactive learning experience for arts and sciences students, and thus to support the initiative of the University Planning Task Force on Undergraduate Education to create engaging, interactive, hands-on learning experiences for students (University Planning Goal 2, Initiative 1, Tactic 2). Improved learning outcomes for philosophy majors in PHL 312 would also lead indirectly to improved outcomes for philosophy majors' analysis of philosophical issues (Philosophy Major Assessment Plan, Learning Objective 2, Measure 2a).

### Project Design and Timeline for Completion

The bulk of the work for this project will be devoted to the preparation of 28 audio captures of lectures of 10-15 minutes each during Summer Pre-session (May 20 – Jun. 7, 2013) and Summer Term 2 (Jul. 15 – Aug. 9, 2013) in Summer Session 2013. My experience producing audio lecture captures suggests that 3 hours of work will be required to prepare each 10-15 minute lecture, including preparing the slideshow, rehearsing the lecture, and recording the lecture in multiple takes. I will then make the resulting 28 audio lecture captures available as assigned viewing on the BlueLine2 site for PHL 312 in Fall Semester 2013. During Fall Semester 2013 (Aug. 21 – Dec. 13, 2013), I will teach PHL 312 Symbolic Logic for the first time as a hybrid course, using the same textbook that I have used in previous, traditional offerings of the course for the sake of consistency. At the end of the semester (Dec. 16-20, 2013), I will assess student learning in the course with respect to the same 4 course learning objectives that I have pursued in previous, traditional offerings of PHL 312.

Once I have finished teaching the new, hybrid version of the course and conducting assessment of student learning in the course in Dec. 2013, I plan to draft a conference paper presenting preliminary results of this scholarship of teaching and learning project. After presenting this paper to an on-campus research colloquium during Spring Semester 2014 I plan to submit a revised version of the paper for possible presentation to a conference such as the International Society for the Scholarship of Teaching and Learning 2014 Conference in Oct. 2014 or the 2015 SoTL Commons at Georgia Southern University in Mar. 2015. After receiving feedback to my preliminary results from a conference audience, I will gather further data in a second, hybrid offering of PHL 312 in Fall Semester 2015 and then submit a final version of my paper to either a disciplinary pedagogical journal, such as *Teaching Philosophy*, or an interdisciplinary journal of the scholarship of teaching and learning, such as *Teaching & Learning Inquiry*.

### Expected Products of the Project and the Sustainability of the Project

The pedagogical materials that I would produce through this project are mainly the 28 audio lecture captures that I intend to prepare and make available on the BlueLine2 site for PHL 312 for Fall Semester 2013. Once prepared, these audio lecture captures could easily be reused in future offerings of PHL 312 as a hybrid course, thus making the project sustainable well into the future after the initial funding period of the grant.

The scholarly materials that I would produce through this project are an on-campus scholarship of teaching and learning presentation in Spring Semester 2014, a presentation to a national or international scholarship of teaching and learning conference during 2014-2015, and an essay to be published in a peer-reviewed journal.

### Budget Request

The main resource that is required to complete this project is my own time, which needs to be diverted from other projects to the preparation of 28 audio lecture captures for PHL 312 during Summer Session 2013. In order to free up my time from other projects, I am requesting \$1680 payable to me as the sole investigator for this grant, at a rate of \$20 per hour for an expected total of 84 hours of labor. In addition, I am requesting \$35 to purchase a Logitech USB Headset H 530 with Premium Laser-Tuned Audio to use in recording the audio lecture captures. Thus my total budget request for the grant is \$1715.

## Bibliography

Folley, Duncan. 2010. "The Lecture is Dead Long Live the e-Lecture." *Electronic Journal of e-Learning* 8 (2): 93-100.

Jefferies, Amanda and Ruth Hyde. 2010. "Building the Future Students' Blended Learning Experiences from Current Research Findings." *Electronic Journal of e-Learning* 8 (2): 133-140.

Vernadakis, Nikolaos, Panagiotis Antoniou, Maria Giannousi, Eleni Zetou, and Efthimis Kioumourtoglou. 2011. "Comparing Hybrid Learning with Traditional Approaches on Learning the Microsoft Office Power Point 2003 Program in Tertiary Education." *Computers & Education* 56 (1): 188-199.