January 7, 2014

Dr. Michael Vaughan, Provost
Weber State University
1004 University Circle
Ogden, UT 84408-1004

Dear Mike,

I write to apply for the Innovative and Creative Undergraduate Teaching grant, offered under your Fund for Excellent Undergraduate Teaching. My proposal, detailed below, is to develop an electronic, interactive version of a critical thinking textbook I have written, to be used in conjunction with a blended version of PHIL HU1250 Critical Thinking, beginning fall 2014.

Background
I have taught over thirty sections of critical thinking classes in both face-to-face and online formats at five different universities, including WSU. While teaching at The College of William and Mary, I wrote an unpublished critical thinking textbook entitled The Art and Science of Critical Thinking, which I used successfully in several of my classes. While I have not used this text since coming to WSU, choosing instead to experiment with some different material, I consider it pedagogically sound and would like to take the opportunity to make it an e-text that includes the following elements:

- Short embedded lecture videos to accompany each of the major sections
- Interactive practice problems that provide immediate feedback
- Links to external resources that supplement the material presented in the text

Putting the text in this format will facilitate being able to offer the course in a blended modality.

Preparation
I have been accepted into the WSU Blended Learning Program for spring 2014, a semester-length intensive program that will cover all of the pedagogical bases for offering blended/flipped courses. My application to this program specifically identified Critical Thinking as the class I intend to offer in a blended format in future semesters.

Rationale

Depth of Impact
The philosophy program has not yet offered any blended or flipped classes. Given the nature of the discipline, it makes the most sense to introduce these innovations in our skills-based classes, namely, critical thinking and deductive logic. From my experience teaching critical thinking, one of the challenges is getting students to be able to apply the tools they learn to material outside of
the problems presented to them in the textbook. In terms of Bloom’s taxonomy, I have had much success getting students to learn and understand the material, but less success in teaching them the skills of application, analysis, and evaluation. Creativity has not, to this point, been one of the skills I have attempted to impart. A primary reason for this is the amount of class time required to lecture on the material. Creating a blended class will free up considerable time that I can then use to help students develop their higher-level skills. This will be accomplished in three ways:

- The skills of application, analysis, and evaluation will be further developed by including selections from academic writings, editorials, articles, and other sources that students will likely engage with throughout their educational years and beyond.
- The skill of creativity will be developed by requiring students to write arguments that fit certain standard argument forms and that either commit or avoid committing various mistakes in reasoning. For example, students might be asked to write two analogical arguments on a given topic, one of which violates one or more of the criteria for evaluating analogies, and the other of which does not.
- All of the aforementioned skills will be developed further by creating communities of learning and having students work collaboratively and actively both in class and online to evaluate more sophisticated readings than I would be able to cover in a typical critical thinking class. Again, this will be because of the additional class-time that will be freed up by teaching the course in a blended format.

Breadth of Impact

Over the past several semesters, I have taught critical thinking online and have had no trouble filling my sections of 35-40 students. Teaching the class in blended format means that the enrollments will be between 42 and 70 students, depending on the classroom and demand. I will continue teaching at least one section of the course each semester, and, if the project proves sufficiently successful and generates sufficient demand, I may offer more than one section per semester. Further, I expect to continue revising my instructional materials according to feedback I receive concerning their clarity, thoroughness, and other measures. Finally, I have plans in the near future to write an additional chapter on Rogerian argumentation, which will introduce a more substantive writing component into the class.

It should be noted that while this is a skills class for philosophy majors and minors, it is also very attractive to students in other programs, including pre-law. Thus, enrollments have never been a problem.

This project will also have an impact beyond my own teaching. Our program frequently offers sections of critical thinking taught by adjuncts, most of whom have not taught critical thinking prior to hiring on with us. (This is not a class that graduate students typically get to teaching during their graduate school years.) Setting up an online text with lectures and other resources will provide them a significant resource to use in their own sections, while also creating consistency of material across our department. Further, it will offer a tremendous professional development opportunity for our adjuncts, as most of them have not yet learned the techniques of blended teaching.

Finally, the project has the potential to have a very wide impact outside of WSU. The journal Teaching Philosophy is the discipline’s only peer-reviewed publication devoted to pedagogical issues in philosophy. There has not yet been anything published in the journal on the effectiveness of blended learning in philosophy, let alone in critical thinking. My experiences in the blended learning program, combined with teaching it with an e-text designed specifically for
this modality, will provide useful data for any philosopher considering converting their class (critical thinking or otherwise) to a blended format. Thus, one of my goals of this project is to produce a journal article discussing the project’s effectiveness.

Measurement
Currently, students enrolled in critical thinking are assessed according to the following departmental learning objectives:

- Students completing the course will demonstrate a measurably increased ability to:
  - identify and reconstruct arguments contained within passages
  - determine whether an argument commits a logic fallacy and, if so, identify which one and explain how it is committed
  - identify cognitive and perceptual errors that might be affecting an author’s reasoning within an argumentative passage
  - formulate and evaluate competing hypotheses for phenomena in need of explanation, so as to make an informed judgment about the hypotheses’ comparative strengths

In light of my course revisions pertaining to Bloom’s taxonomy, I will also be assessing students’ ability to formulate arguments and identify real-world examples that can be incorporated into the text (both being measures of creativity).

Accountability
Completing this project will require a number of steps over a two-semester period:

Spring 2014:
- Participate in the WSU Blended Learning Program to learn about the methodologies and best practices involved in blended and flipped learning.
- Learn the requisite functions of Expression Web software (a web authoring tool). My web authoring experience to date has been with FrontPage, which the university no longer supports.
- Become more familiar with the more advanced editing and production features of Camtasia, a screen-capture program that I have used to create videos for my online courses.

Summer 2014:
- Convert textbook to electronic format. This will include the following:
  - Revise each chapter.
  - Upload text into Expression Web and revise and reformat each chapter, as necessary.
  - Write and record lectures to be incorporated in each chapter section. I already possess the requisite hardware (webcam), software (Camtasia) and experience to do this, having created many recorded lectures for my online courses.
  - Create interactive problem sets for each chapter section.

My budget is to cover half-time salary during ten weeks of the summer, during which I will revise the entire text and convert it into an electronic format. I anticipate that each of my eight chapters will require 25 hours of work, involving the following:

- Editing/formatting each chapter for electronic format
- Writing transcripts for each video lecture (one for each chapter section, which vary from two to seven sections, depending on the chapter, for a total of 31 sections)
• Writing PowerPoint presentations to be incorporated into the video lectures
• Recording and producing each video
• Putting practice problems into interactive electronic format

Based on my current salary ($55,000) for a 39-week contract at 40 hours per week, I make $35.25/hour, which is the amount I am using for budgeting:

Salary (200 hours * $35.25/hour): $7050
Benefits (.22 * 7050): $1551
Total Budget: $8601

Description of the Innovation
See “measurement” under the rationale section above.

Preliminary Evidence
Though I am unaware of any critical thinking classes being taught in a blended mode (as noted above, none has been discussed in Teaching Philosophy), there is ample evidence that the online discussion component of blended learning enhances critical thinking skills (Newman, Webb, & Cochrane, 1995; Newman, Johnson, Cochrane, & Webb, 1996; Meyer, 2003; Abrams, 2005). From my own experience, it makes sense to think that offering the class in this mode will allow for improved learning, as I will be able to devote more class time to group work, problem solving, individual attention, and projects that require creative application of skills, rather than the lecturing and “answer checking” that typically occur in critical thinking classes.

Implementation
See “breadth of impact” under the rationale section above.

Detailed Assessment Plan
Beyond the course learning objectives, I am particularly interested in seeing whether the project will be effective at improving the skills identified in Bloom’s taxonomy. To that end, I will tie each of my assignments to the relevant skills of understanding, application, analysis, evaluation, and/or creativity, and assess the degree to which students are achieving these. I fear, however, that my assessment results will not be meaningful without a point of reference or comparison. Thus, in spring 2015, I would like to teach two sections of the course—one with my original text in a non-flipped format and the other in a flipped mode using my electronic text—and compare the assessment results. If my teaching schedule will not allow that, I will teach the two different models in successive semesters. While less than ideal, this would still yield useful data.

Sustainability
See “breadth of impact” under the rationale section above.

Detailed Budget
See “accountability” under the rationale section above.

Thank you for your consideration; I look forward to your decision.

Sincerely,

Bob Fudge
Appendix 1: Comparison of the Text Versions

Following is the first page of my fourth chapter in its current format:

By contrast, following is a mock-up of how an enhanced web version of the same text might appear:

Instructional videos for each section:

Interactive practice problems:

Links to assignments/external resources:
Appendix 2: Sources Cited


