TEACHING INNOVATIONS IN ECONOMICS

Strategies and Applications for Interactive Instruction

Edited by

Michael K. Salemi
*University of North Carolina at Chapel Hill*

William B. Walstad
*University of Nebraska–Lincoln*

Edward Elgar
Cheltenham, UK • Northampton, MA, USA
CONTENTS

Tables and Figures vi
Contributors vii
Foreword ix

Preface xi

1. Developing Teacher Expertise for Economists through a Workshop Experience
   Michael K. Salemi 1

2. Online Faculty Instruction to Improve Interactive Teaching of Economics
   Mark Maier, Tisha L.N. Emerson 25

3. Advancing the Scholarship of Teaching and Learning in Economics
   KimMarie McGoldrick 46

4. Making Cooperative Learning Effective for Economics
   KimMarie McGoldrick, Robert Rebelein, Jennifer K. Rhoads, Sue Stockly 65

5. Conducting Experiments in the Economics Classroom
   Denise Hazlett, Kathy A. Paulson Gjerde, José J. Vazquez-Cognet, Judith A. Smrha 95

6. Classroom Discussion
   Michael K. Salemi, Kirsten Madden, Roisin O’Sullivan, Prathibha Joshi 120

7. Formative Assessment in Economics Courses
   William B. Walstad, Michael Curme, Katherine Silz Carson, Indradeep Ghosh 145

8. Context-rich Problems in Economics
   Mark Maier, Joann Bangs, Niels-Hugo Blunch, Brian Peterson 170

9. Case Use in Economics Instruction
   Patrick Conway, Derek Stimel, Ann E. Davis, Monica Hartmann 190

10. Interactive Large Enrollment Economics Courses
    Gail Hoyt, Mary Kassis, David Vera, Jennifer Imazeki 220

11. Findings from a Teaching Innovation Program for Economics Faculty
    William B. Walstad 243

Index 262
Researchers document numerous constraints and barriers to pedagogical change (Henderson and Dancy 2007; Dancy and Henderson 2010; Henderson, Finkelstein, and Beach 2010). Most notably, barriers include teachers’ sense of self-efficacy, quality and quantity of pedagogical training, time constraints (i.e., instructor’s time, content coverage requirements), assessment difficulties (i.e., external accountability, measuring student performance), and insufficient support and rewards for teaching effectiveness (see Walczyk, Ramsey, and Zha 2007; Sunal et al. 2001; Michael 2007; Henderson and Dancy 2007; Findlow 2008; Abrami, Poulsen, and Chambers 2004). As a result, despite the significant literature on effective pedagogical practices across many disciplines, a recurring theme of failure to innovate emerges. In practice, pedagogical change occurs at a slow pace – if at all. The failure to produce change then is not always a result of faculty who are unaware of best practices, but instead of faculty choosing less effective practices over proven superior practices (Henderson and Dancy 2007). One of the challenges, then, of professional development programs involves overcoming the numerous barriers to innovation.

Research suggests that professional development activities will have a significant, positive effect on teachers’ classroom practice if they have certain characteristics. Key features of effective faculty development programs
include sustained involvement over a number of hours, opportunities for active learning, follow-up training for skill refinement, and opportunities for faculty to be involved in the development of new pedagogy through collaborative experiences and opportunities to exchange ideas (Garet et al. 2001; Abrami, Poulsen, and Chambers 2004; Hiebert, Gallimore, and Stigler 2002; Major and Palmer 2006; Owston 2007; Postareff, Lindblom-Ylanne, and Nevgi 2007; Henderson, Finkelstein, and Beach 2010). Further, to the extent that professional development programs can address any of the other, external identified impediments to innovation such as assessment difficulties and insufficient support or reward systems, they will be more effective in promoting pedagogical innovation.

Workshops are a common element in traditional faculty development programs. Unfortunately, research demonstrates that even the best organized and delivered traditional faculty development efforts such as short seminars and workshops are relatively ineffective in promoting significant and lasting changes in instructor classroom behavior (Garet et al. 2001; Hiebert, Gallimore, and Stigler 2002; Sunal et al. 2001; Owston 2007; Roy 1998). Single- or multi-day workshops often fail to induce changes in instructor pedagogical practices for two main reasons. First, instructors’ workshop exposure to new pedagogies is generally too brief. Second, instructors are rarely afforded post-workshop follow-up (Michael 2007). Thus, while workshops are meant to afford participants with pedagogical training, research suggests that they are not particularly effective nor do they address the many other barriers identified in the literature.

The Teaching Innovations Program (TIP) provided a significant improvement over traditional professional development projects as it addressed many of the barriers to innovation identified in the literature. While the first phase of TIP consisted of a relatively traditional workshop experience, it built the foundation for the next two TIP phases. It is the TIP experience in its entirety that served as the program’s major advance over previous pedagogical innovation initiatives.

The purpose of the current chapter is to describe Phase Two of the TIP experience. The remainder of the chapter is organized as follows. Section I presents a detailed description of Phase Two of the TIP experience, including a description of the pedagogical innovation modules. Section II discusses participation levels and participant evaluations of their experiences. Section III describes the logistics involved in Phase Two – from the point of view of both participants and the Phase Two coordinator. Section IV offers recommendations for improvements in future professional development initiatives of the type employed in Phase Two. Appendix 2A provides an example of a participant plan including module instructor comments.
I. PHASE TWO OF TIP

The Teaching Innovations Program (TIP), sponsored by the American Economic Association Committee on Economic Education (CEE) and funded by the National Science Foundation (DUE #03-38482), ran for five years, serving 335 faculty teaching in a wide variety of U.S. colleges and universities. Two workshops were held each year (Phase One) where participants were introduced to seven interactive strategies for teaching college level economics. Upon completion of Phase One, participants were invited to enroll in online instruction in a module of their choice (Phase Two) where they would receive supplemental instruction in applying the innovation in one of their courses.

Phase Two was administered through the use of the Blackboard course management software located at the University of Nebraska–Lincoln. Modules offered instruction in the following pedagogical approaches: Assessment, Cases, Context-Rich Problems, Cooperative Learning, Discussion, Experiments, and Large Enrollment Courses. The TIP Blackboard site included a TIP preview page that provided a summary of each module as well as the modules themselves. With successful completion of two modules a participant earned a certificate of achievement from the CEE.

Finally, TIP offered support for participants to develop scholarly papers and presentations based on their work in one or more modules (Phase Three). Chapter 1 of this volume reports on the TIP workshops in detail, Chapter 3 reports on TIP Phase Three activities, and Chapter 11 reports on participants’ retrospective assessment of TIP.

For ease of use and quality assurance, a common format was employed for all seven modules. Each module contained all materials presented at the TIP workshops, required readings for completion of the module, a set of required tasks (including a self-test and development of an implementation plan), additional recommended readings, and examples of participant work.

Each module contained a set of assignments that led participants through six steps for successful implementation of their chosen pedagogical innovation.

1. Participants were provided with a set of required readings with information about the pedagogical innovation and its successful implementation.
2. Participants completed a short self-graded, multiple choice format, assessment to focus attention on the central concepts in the required reading and to initiate discussion with the module instructor if the arguments were unclear or unconvincing.
3. Participants identified the learning goals for the innovation and submitted a work plan for implementation of the innovation. Module instructors reviewed the work plan and provided feedback. Appendix 2A provides an example of a participant plan for a cooperative learning exercise and the detailed comments provided by the module instructor to help the participant refine and implement the plan.

4. After receiving feedback from the module instructor, usually in a week or two, and often involving a back-and-forth discussion about the plan, the participant used the innovation in the classroom.

5. Participants completed a reflective exercise, evaluating the innovation and providing evidence of its outcomes.

6. Participants completed an anonymous survey evaluating the module as a whole.

While each module utilized the same general structure, implementation of the innovation varied from module to module. In the assessment module, participants read about formative and summative assessment and then evaluated methods currently used in their course and added a new classroom assessment technique. A case is a group of source materials on a single subject, drawn from real experience that places the participants in a decision-making analytical role. In the case module, participants learned how to write and teach a case, and then used a case in one of their courses. A context-rich problem is a short scenario using a non-standard application of an important course concept. Participants innovating through use of context-rich problems read about the principles of context-rich problems, wrote three context-rich problems and then used and evaluated a context-rich problem in a course.

Cooperative learning is a structured, systematic instructional strategy in which small groups work together toward a common goal. In the cooperative learning module, participants read about cooperative learning and designed and implemented a cooperative learning exercise.

In an inquiry-based discussion, students investigate the meaning of a text by responding to question clusters created by the instructor. In the discussion module, participants wrote question clusters for a reading and then led a discussion in their classroom. In a classroom experiment, students make economic decisions in a controlled environment that become the data the class later analyzes. In the experiments module, participants chose a classroom experiment, adapted it for their course, and then employed it. Finally, in the large enrollment module, participants implemented activities and format changes that allowed them to add interactive learning to their large enrollment courses.
II. PARTICIPATION AND EVALUATION

A total of 335 economics instructors participated in Phase One of the TIP program. All workshop graduates were invited to enroll in a module in Phase Two. At the end of the project in June 2010, 70 percent of TIP workshop participants had enrolled in a module, 39 percent completed a module, and 27 percent completed two modules and earned a certificate from the CEE. The most frequently selected modules were Discussion, Experiments, and Cooperative Learning, each completed by more than forty participants.

Participants completed an evaluation of the module and their experience. Anonymous evaluation of the modules was overwhelmingly positive, indicating that they were efficiently organized and effective in improving instruction: 96.9 percent of participants indicated that follow-on instruction was “a better use” (61.7%) or “as good a use” (35.2%) “of my time as the next best alternative,” 97.4 percent strongly agreed or agreed that they received helpful feedback from the module instructor, and 100 percent strongly agreed or agreed that the module helped them learn how to use the innovation. Table 2.1 provides the responses to seven survey questions.

Table 2.1: Participant Evaluations of Phase Two

<table>
<thead>
<tr>
<th></th>
<th>Percent of Responses (n = 193)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The module was easy to use.</td>
<td>56.5 38.9 2.6 1.6 0.5</td>
</tr>
<tr>
<td>The selection of readings included in this module was useful for learning about the innovation.</td>
<td>62.7 32.6 4.7 0 0</td>
</tr>
<tr>
<td>Completing the “check your understanding” assignment helped me learn about the innovation.</td>
<td>44.9 42.2 11.6 1.4 0</td>
</tr>
<tr>
<td>The preparatory plan assignment provided a valuable guide as I planned my use of the innovation.</td>
<td>68.4 28.5 3.1 0 0</td>
</tr>
<tr>
<td>I received helpful feedback from the TIP module instructor.</td>
<td>88.6 8.8 2.1 0.5 0</td>
</tr>
<tr>
<td>Completing the assessment of my innovation was a worthwhile activity.</td>
<td>62.2 31.6 5.7 0.5 0</td>
</tr>
<tr>
<td>Overall, this module helped me to learn how to use the innovation.</td>
<td>76.2 23.8 0 0 0</td>
</tr>
</tbody>
</table>

Note: SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree
The module evaluation included two open ended questions: “What I liked best about this module is…” and “What suggestions do you have for improving or changing the module?” Responses to these questions offer additional evidence that participants valued their Phase Two experiences. A typical overall comment called TIP “the best professional development opportunity in my ten year teaching career.” Respondents pointed out three reasons for the TIP modules’ effectiveness: they followed directly on workshop content; they allowed participants to experiment with an innovation in a course they were currently teaching; and, they allowed for repeated and supportive interaction with experts.

A sample of participant comments to the open-ended questions follows:

**General Comments**
There is plenty of information in the module to get you started, but the instructor’s review of materials really makes all the difference. The feedback, at all stages, is great! What I found most useful was the opportunity to practice the suggestions in the readings by planning for a class, engaging my students in a class discussion, and evaluating the outcome – all with your very prompt, supportive feedback.

The quality of the feedback I received from the moderator was excellent. I think this is what helped me to learn the most.

The instructor was committed to the goals of the project, and was willing to engage in extensive discussion with me. This interchange helped me improve my understanding, and to apply this discussion innovation to my own objectives in my own classes.

I think the feedback from the module leader is a very extraordinary and beneficial part of this program. This is true with this module as well as the others. Fabulous!

**Comments on Learning Goals**
Participating in this module forced me to sit down and think about the topics that students find particularly difficult in the second principles course and to come up with a strategy to help them.

What I liked best about this module is that this kind of assignment needs a significant amount of thinking-time for the instructor to figure out the goals of the course, and how this assignment can achieve them.

As I said in the earlier assessment, it made me think about what and how I choose to teach. I think that it’s very easy to teach on autopilot, and this made me examine my choices.

The suggestions obtained from the module instructor forced me to think through the objectives of this exercise.
Online Faculty Instruction

While participants overwhelmingly felt that Phase Two was a beneficial experience and helpful in their implementation of active learning strategies in their courses, there were some aspects of the modules that were less successful. Participants felt somewhat constrained by the Blackboard website noting “the website is not very user friendly” and “It would be helpful to have a website that is designed specifically for this program – not one run through the University of Nebraska web site.” In fact, most module instructors chose to communicate directly with participants via email.

The lowest rated section of the module was “check your understanding,” usually a multiple choice self-graded test – although the level of dissatisfaction was only 13 percent neutral or disagreeing with the statement that it helped them. Participants wrote, “I wanted the first quiz to be more substantial. Doing well on it did not convince me that I’d really developed more than a superficial understanding of the material” and “I don’t like the online quizzes, but I do understand why they need be in the module.”

Participants wanted the modules to offer more collaboration with others in the program, commenting: “In the future, I would suggest providing information as it becomes available from current participants on their experiences with this module. What did they learn? What problems did they encounter, if any, and how did they overcome them? What did they find worked especially well?” One suggestion was that “a peer review feature should be added, where one participant would, perhaps informally (or less formally) review another’s innovations. This way, all participants would get a chance to see what at least one other person is doing. The enthusiasm for sharing ideas and keeping in touch expectedly died down after we left the conference, and this would be a small way to keep the fires burning.”

Participants would have liked more references to the research literature on each pedagogy, especially related to learning goals and assessment, an addition that might have helped with the transition to Phase Three. As one participant explained, “While Phase II seems to easily flow from Phase I, Phase III is quite a stretch. Maybe this is by design. If not, I would suggest a question that asks faculty to think of an extension of the innovation in a way that they are not familiar. This might give TIP participants something to build on for Phase III.”

III. LOGISTICS

After completing Phase One, participants were enrolled in TIP Preview, a course on the UNL Blackboard system. Here participants could download all materials used in the Phase One workshop and preview the readings and assignments used in each of the modules. The seven TIP modules also were created as courses within Blackboard and participants were invited to enroll
in one of the seven modules in Phase Two. Enrollment involved simply sending an email to the module coordinator indicating the module of their choice and the time frame for their intended implementation. Generally within twenty-four hours of indicating their enrollment intention, the participant was provided full access to the materials for the module of their choice through the Blackboard course management software. The participant was responsible for completing the required reading, self-assessment, and development of learning objectives and implementation plan. The participant would then communicate their learning objectives and plan to the module instructor for feedback. After exchange with the module coordinator, participants implemented the pedagogical change in their course and assessed the outcome.

Participants enrolled in one module at a time and were limited to completing two modules after which they earned a certificate from the CEE. The two-module cap was a direct result of scarce resources and an attempt to limit the workload on any one of the module instructors. As noted above, enrollment was uneven among the modules with greater participation in the Cooperative Learning, Discussion and Experiments modules, but none was completed by more than fifty participants during the project’s five years.

The module coordinator’s responsibilities focused on TIP’s Blackboard site at the University of Nebraska–Lincoln. Although Blackboard courses are designed for traditional instruction, their format was adjusted readily for TIP modules allowing for the posting of readings, submission of participant work and an anonymous survey after module completion. As a well-established university program, technical support was available to the module coordinator when enrollment or course management issues arose. The module coordinator made certain that each module appeared the same to each participant and that all elements were working as planned.

The module coordinator used information stored on Blackboard to keep track of module enrollment and module completion for annual reports prepared for the project principal investigators. In addition, the Blackboard survey tool was used to compile assessment data submitted by participants after they completed each module as well as answers to open-ended questions about the module’s effectiveness.

IV. RECOMMENDATIONS FOR THE FUTURE

TIP Phase Two offers a model for future projects in economic education and indeed for other disciplines seeking to foster innovative instruction. Credit for the project’s well-designed format goes to co-principal investigators Michael Salemi and William Walstad who envisioned the three-part structure of TIP, and outlined the module format for each instructor. The result was an
effective set of modules that benefited over one hundred and fifty instructors who completed at least one module.

As evidenced by the findings in the literature, all too often faculty development workshops stimulate interest in new teaching techniques that are then never employed in the classroom (Roy 1998). In contrast, TIP involved far more than a simple workshop experience. By engaging participants in a continued interaction with module experts (and other innovators in Phase Three), the TIP experience extended the contact hours and provided the workshop follow-up suggested as being necessary in the literature to overcome pedagogical innovation implementation barriers (Abrami, Poulsen, and Chambers 2004; Findlow 2008; Garet et al. 2001; Hiebert, Gallimore, and Stigler 2002; Major and Palmer 2006).

In particular, work in Phase Two was designed to encourage participants to move beyond their usual pedagogical practice. Recognizing that participants would often choose an unfamiliar instructional strategy, Phase Two provided them with support to implement it.

The TIP modules were built on a series of steps from identification of learning goals, to implementation of the innovation, to final assessment. By requiring that participants complete all steps, the module took participants through a cycle of course preparation that is often recommended but not always followed (Wiggins and McTighe 2005, 16; Fink 2003, 73–81). With the support and feedback of module experts, participants likely experienced increased confidence in their ability to effectively implement the new pedagogies in a manner tailored to their particular classroom environment. In addition, the certificate granted for completion of two modules increased the professional rewards and acknowledgement associated with their efforts to innovate. Thus, while it is impossible to know what the innovation level would have been absent the second and third phases of TIP, it is likely that participants realized significantly higher levels of classroom innovation than would have occurred with the workshop experience alone.

The many successes of TIP Phase Two are useful in directing future professional development programs. By addressing many of the barriers to classroom innovation identified in the literature (insufficient workshop follow-up, quality of training, tailoring of innovations to specific situations, and perceived lack of reward/ recognition for innovation), Phase Two serves as a model for future professional development efforts, both within economics and in other disciplines. Moreover, the TIP Phase Two modules themselves comprise a rich resource for pedagogical innovation. As a result, we believe that the content should be preserved and extended. Further, given the effectiveness of both the content of the modules and the overall structure, we believe that the content should be made more widely available to
Teaching Innovations in Economics

Economics instructors (including graduate students who currently are teaching or will be shortly) in a manner akin to that in Phase Two.

While there is much to emulate in Phase Two, future professional development efforts also can learn from the small problems experienced in Phase Two as they provide such programs with teachable moments. Areas for improvement include use of alternatives to the Blackboard course management system, greater support for instructors in developing learning goals and assessment, and more intentional linking of complementary pedagogical techniques.

One limitation of Phase Two was its reliance on a university course management system (Blackboard). Since Blackboard was designed for traditional college courses, some of its functionality was less geared toward the needs of a professional development program. For example, the self-assessment function looked like a test and likely reminded participants of graded summative assessment that was not intended. Also, while Blackboard supports communication tools, it is less direct than traditional email. Thus, some module instructors bypassed Blackboard, preferring to use traditional email instead of using the Blackboard communication tools. As a result, module instructors maintained records of participant work, but there was no central repository as could have been possible had all work been sent through Blackboard. In retrospect, while there were advantages of using an existing system that offered ready technical support, a more ideal approach would employ a more flexible course management system that could be formatted specifically for TIP and would encourage archiving of all communications and participant work.

Economic educators and education researchers agree that learning goals need to be identified before pedagogical techniques are selected (Hansen, Salemi, and Siegfried 2002; Fink 2003; Weimer 2002). As a result, all TIP modules first ask participants to specify what students would learn – a step that TIP participants often found to be challenging. Even though participants recognized the importance of writing learning goals, it had not been part of their usual curriculum planning. Future initiatives should provide additional assistance, perhaps in the form of a tutorial, based on Understanding by Design (Wiggins and McTighe 2005, Chapter 3) or Creating Significant Learning Experiences (Fink 2003).

TIP participants also had difficulty in developing assessment tools. The final step in each module asked participants to assess the innovation’s impact on student learning. Because TIP modules were exploratory, often the first time that the participant had used the innovation, the assessment was relatively informal, sharing with the module instructor what went well and what did not. In many cases, the assessment was posted for other TIP participants on the Blackboard web site, and later was the basis for more
Online Faculty Instruction

Additional assistance could have been provided, perhaps in a “What is evidence?” tutorial recommending first of all that more data be collected, even if it was not all used in the final report. For example, it is a relatively simple matter to save copies of student work, survey students before an innovation is begun, videotape students in the classroom, or keep a record of the instructor’s work and thoughts as the innovation was planned. The tutorial would then offer advice on forming hypotheses from these data, developing empirical measures of student learning, and obtaining necessary approval from institutional human subjects committees.

At the TIP Phase One workshops, innovative pedagogy was interwoven into the sessions so that when, for example, participants investigated classroom experiments, they did so using principles of cooperative learning that had been presented in a prior session. For participants’ first classroom use of an instructional technique, it is helpful to focus on one innovation at a time. However, research in physics education suggests that the combined use of innovations has a synergetic effect, improving learning more than the sum of individual innovations (Pollock 2005). Future design of Phase Two modules could include more cross-referencing among modules to encourage follow-on projects that combine more than one active learning technique.

Finally, Phase Two also could be extended to include more links to research both in economics education and in other disciplines in which the module’s innovation has been adopted. These resources would build participants’ knowledge as they consider Phase Three scholarly projects. In addition, TIP participants could collaborate with other economic educators, beginning to create a “teaching commons,” bridging the gap between classroom instruction and education research (Huber and Hutchings 2005). Such a community would be even more informed if it crossed disciplines, sharing the comparative advances of each discipline’s work on teaching and learning. See Starting Point: Teaching and Learning Economics for one effort in this direction.

Overall, TIP was a success, reaching more economic instructors than any previous effort in economic education at the college and university level. Phase Two was an important component in this success as it built on the more commonly used workshop model so that participants applied what they had learned in the workshops in an intentional manner, guided by experts in seven different pedagogical modules. Available through a course management system at the University of Nebraska–Lincoln, these modules offered a self-contained introduction to each pedagogy. Interactive coaching with the module instructors then provided TIP participants an opportunity to develop, use, and assess an innovation in a course they were teaching.
evaluations of both the modules and instructor assistance were extremely positive on closed- and open-ended questions. Recommendations for improvement focus primarily on ways in which TIP can further assist instructors in developing learning outcomes and assessing student learning. Every effort should be made to preserve the TIP resources already created and to extend their availability to a wider community.

NOTES

1. The ineffectiveness applies to most transmission-oriented workshops, not just those aimed a faculty development (Fixxen et al. 2005).
2. Research demonstrates that individuals learn more (by two standard deviations) through one-to-one tutoring than from traditional instruction (Meltzoff et al. 2009). One-to-one follow-up post-workshop instruction should result in more significant improvements in instructor skills and self-efficacy than from the workshop alone.
3. Maier’s role in the project was as staff at two workshop sessions, the instructor for one module, and coordinator of the Phase Two web site instructional modules, enrolling participants, and summarizing the evaluations. Emerson participated in a 2007 workshop and was subsequently invited to join the TIP workshop staff for one workshop each in 2008 and 2009. Emerson also participated in the cooperative learning module in Phase Two.
4. The Experiments module did not include this step.

REFERENCES


Huber, M.T., and P. Hutchings (2005), The Advancement of Learning: Building the Teaching Commons, Stanford, CT: Jossey-Bass.


APPENDIX 2A
Sample Participant Plan Prepared by Jennifer Kujawa Rhoads with Module Instructor Comments by KimMarie McGoldrick

1. Based on the One-Sentence-Summary Objective Setting Exercise, list one or two learning objectives you want your students to achieve as a result of implementing this cooperative learning exercise.

   I want to develop my students’ ability to interpret and communicate both sides of controversial health care policy issues during the 2008 presidential election. This will be done both in and out of class by facilitating group analysis and presentation of various health care issues currently being debated in the presidential campaign to help my students learn how to synthesize and communicate health care reform proposals.

   Comment 1: Nicely laid out, does a good job of keeping to learning skills and not focusing on specific content.
   Comment 2: From reading your full plan it looks like you also want them to locate the details of each plan as well.
   Comment 3: Is this based on the integration of individual components into a more comprehensive plan?

   Do you simply want them to communicate or do you wish to add any evaluation, pro/con, etc?

2. List one or two content objectives you want your students to achieve as a result of implementing this cooperative learning exercise.

   Students will understand and be able to evaluate the various issues in Senator McCain’s and Senator Obama’s health care reform proposals (i.e. health insurance mandates, pre-existing conditions, etc.).

   Comment 1: Will there be some set up exercise that students complete to understand which are the key issues? Or will you simply be providing these to the students? For example, if one looks at past presidential campaigns are the health care issues which received focus the same basic categories as for today? Can this also provide an interesting lesson for students? Perhaps a follow us exercise?

3. What category of cooperative learning exercises best fits your objectives? Briefly explain why this is the case.

   The writing category with my addition of an oral presentation fits my objective of students being able to synthesize and communicate health care issues. The synthesis will happen with the group writing portion (written
group worksheets) and the communication will happen with the oral group presentations.

**Comment 1:** Good choice, fits well with your objectives.

4. What specific type of cooperative learning exercise for the category noted in question 6 best fits your objectives? Briefly explain why this is the case.

Features of the round table exercise will be used for the writing portion. Students will be divided into groups of four and given an issue to research and present to the rest of the class. Group members will conduct individual initial research on their assigned issue and will then bring a completed individual worksheet to share with the rest of the group. Note that I believe this initial individual research will be necessary because the students will have limited knowledge about the health care issues. Group members will share their responses in a round table format. They will then work to synthesize their individual answers to produce a group version of the written worksheet.

**Comment 1:** I fully agree, it also promotes individual accountability.

5. Describing your cooperative learning exercise through the process of implementing and evaluating.

a. Preparations (Structuring the Task, Orienting Students): Please provide a description of the exercise you have developed. It should address how the task will be structured and how students will be oriented to cooperative learning.

Students will first be introduced to this project through a paragraph in the syllabus that includes a brief description of the forthcoming activity and the expected outcomes. The paragraph below is what will be included in the syllabus:

**Comment 1:** Good, I like how you have expectations for this project set up right from the start of the semester.

By utilizing the forthcoming presidential election, we will be examining and discussing specific issues pertinent to the U.S. health care system. We will do this through examination of the health care reform proposals of Senator McCain and Senator Obama. You will work in a small group to prepare a written outline of an oral presentation. Group members will be chosen at random to present the various sections of the presentation. As a capstone for this project each student will be responsible for writing a 6–8-page paper.
Comment 1: You might want to include a sentence prior to this which states that they will perform some preliminary research, use groups to refine their understanding and then also prepare the presentation.

Comment 2: Do you want to tell them “on what”?

The structure of the project that I have developed is threefold. There is an initial individual portion, a middle group cooperative portion and then a final individual portion. On September 29, the class will be broken up into groups of four and each group will be assigned a health care issue currently being debated during the presidential election. The initial individual portion of the project is that each student has one week to complete a worksheet for the assigned topic (see attachment 1). This worksheet includes a section for the student to provide some background information on the assigned issue, find or create examples that illustrate the issue, summarize how Senator McCain’s policy addresses the issue, and summarize how Senator Obama’s policy addresses the issue. This initial individual writing assignment is to ensure that each student obtains background knowledge of their topic before discussing it in a group.

Comment 1: Really nicely done. This is a very well thought out project.

Comment 2: How will groups be assigned? Randomly? If so, using what process? Since this is a substantial project, I would suggest that you not use a random draw but rather think carefully about how you might use student opinions to create diverse groups. Recall the line up and divide exercise at the workshop. Could you have students express an opinion on a topic and then create groups so you have a diversity of perspectives?

Comment 3: How will these be assigned? Does the process by which you assign particular issues to a specific group matter?

Comment 4: In question 1a, how detailed do you want them to be? Do you expect them to come up with some statistics supporting their background knowledge? Should you remind them to keep track of their citations in case they need them for their individual papers (avoid plagiarism!).

On October 6, the cooperative learning portion of the project will take place during class. The students will bring their individual worksheets to class and then meet in their small groups to discuss, synthesize and compromise until a group version of the same worksheet has been produced (see attachment 2). This written worksheet will serve as the basis of an oral presentation to the rest of the class, which the students will have one week to prepare. The presentations will cover the same four aspects of the health care issues included in the worksheet. On the day of the presentation, the group members will be chosen at random to present a portion of the presentation.
Therefore, each student will be presenting one section from the group’s presentation but they will not know which one (i.e. background, McCain’s proposal, etc.). These presentations will be on October 15 and 17.

**Comment 1:** Excellent link to the number of students in a group so that you can randomly call on them.

**Comment 2:** My students hear ‘presentation’ and think they MUST have a fancy PowerPoint presentation. To what extent will you expect this presentation to have audio/visual/etc. After all, it is possible for them to even add video links to the candidates speeches which help define their position. I know you suggest to them only 2 minutes per section, but do you want to address the level of formality too?

The final individual portion of the project is a written paper allowing the student to summarize and evaluate the information presented by all the groups. This paper should be 6–8 pages long and will be due roughly 3 weeks after the presentations are over (about November 3).

**Comment 1:** Good, this will provide them motivation to pay attention while other groups are presenting.

b. Set up (Introducing the Exercise, Forming Groups, Group Decision Making Strategies): Briefly describe how you will introduce this exercise to students, what method of group formation and of what size you have chosen, and the extent to which you will describe group decision making processes to your students.

When I introduce the project to the class on September 26, I will pass out a descriptive handout that outlines the process of the activity and deadlines (see attachment 3). I will form groups randomly using my alphabetical listing of the roster. I anticipate having 8 groups of 4 students. Groups will be instructed to continue discussing individual responses and review resources until they can all compromise on a group response to each question.

**Comment 1:** This is really well laid out for the students. I especially like the fact that you have them running against both of the candidates, forcing them not to rely on their republican or democratic tendencies but to work on the issues.

**Comment 2:** You will be almost a month into the course by the time this assignment starts. Will you have any more knowledge of the students on which to base this assignment? Consider diversity in forming groups… as suggested above, diversity in opinions or performance in the class to date.

**Comment 3:** You already have some components of the exercise that require each student to participate, at least initially when they share their individual worksheets. But could this be refined a bit. First, you might
find that a shy person will claim that what they had on their worksheet was basically the same as what others have said, even if this is not entirely true. You might want to be clear in the directions that each individual is to read aloud their answer to the section they are working on. Second, after this sharing is complete there is no mechanism that prevents a dominant person from taking over. Can you think of adding either roles or some processing suggestions to keep this from occurring? It may be enough to simply remind them that everyone must agree and understand since they will be randomly called upon to present each section.

c. Monitoring (Behaviors, Task Completion): Briefly describe how you will interact with groups during the exercise and what follow on activities you have developed for those groups finishing their task early.

I have scheduled a 50-minute class period to devote to in-class group work. I will be circling throughout the room to keep an eye on each of the groups to make sure they are on task, reinforce positive progress and be available to answer any clarifying questions about the project (not content). If a group finishes before the class period is over I will quickly review the group worksheet and either suggest areas needing improvement or direct the group to begin preparing the oral presentation.

Comment 1: Good, I think this is enough time for them to get through the worksheets, and potentially think about a presentation.

Comment 2: I wonder about this. In some ways it rewards those who have finished first in a way that other groups can't take advantage of. Typically, we like to have extension exercises as an add on to CL exercises so that it keeps students focused on the exercise without providing them an advantage over other groups.

d. Closure: (Quiet Signal, Providing Closure to the Exercise, Processing Group Functioning, Grading and Evaluation): Briefly describe your quiet signal, how you will bring closure to the exercise, the extent to which you will discuss group functioning with the class, and whether this exercise will be directly evaluated.

I typically bring a class back together after group work by standing in the front of the room and asking for their attention. This typically works, but if it doesn't then I will flick the lights on and off as a signal.

This activity will be evaluated for a grade. There will be an immediate formal reporting out activity in the form of a group worksheet that includes the synthesized responses of each group for its health care issue. The group is required to turn its completed worksheet in to me before leaving class on the in-class work day. I will grade the worksheets on the basis of correct
content and completeness, and return them the next class period so the groups can use them to create their oral presentations.

Comment 1: I like this. Students are evaluated at the individual and group level, the evaluation is timely, and they get feedback before moving forward. Question: I assume you will be collecting the individual work as well… will you need to ask students to bring 2 copies, one for grading and one for group work? I suspect many of them will want to hold onto their individual sheets even after their group work as they continue to think about the project.

There will also be a delayed formal reporting out activity in the form of an oral presentation that will be graded for accurate content, clarity, knowledge of the material and effectiveness in conveying the information to the class. As mentioned above, the students will be chosen at random to present one section of their group presentation. This will promote students working hard together to ensure that each group member fully understands and can explain any section of the presentation.

Comment 1: Yes!

6. Briefly explain how each of the four key elements will be incorporated into this exercise.

   e. Positive interdependence

Comment 1: Don’t you also have resource interdependence? After all, the students bring individual research to the group and while some may overlap it is likely that each will have something unique in their contribution.

   Output goal interdependence – each group must develop a single group worksheet and oral presentation.

   Learning goal interdependence – group members will be chosen at random to present the various sections of the oral group presentation. Therefore, all members of the group need to be able to explain every section of the group’s presentation.

   f. Individual (and group) accountability

   Individual accountability – Each student is responsible for preliminary research that he or she then shares with the group. In addition, after all of the groups have completed their presentations, each of the students is responsible for writing a 6–8-page analysis of all of the issues presented by the groups.

   Group accountability – Each group will receive a group grade for its group worksheet and oral presentation.
g. Equal participation

Students will be required to do initial research on their group’s assigned health care issue before actually working together as a group. Each student must find at least two resources to bring to class and complete a worksheet where he or she completes initial thoughts/preliminary answers to each of the four sections for the assigned issue. This ensures that the individual group members are prepared to participate in the round table exercise in class with their groups.

**Comment 1:** Yes, but note my comment above. While they are prepared, beyond initial sharing there is little incentive to continue to participate. They could simply take what the group decided and use it for the presentation. I am not suggesting you need to change something, just think about it.

Also, groups of four students will be formed and each group will be preparing an oral presentation of the four sections of their assigned issue (background and current state, examples illustrating the issue, McCain’s position and Obama’s position). Students will be chosen at random to present one of the sections from their group’s presentation.

h. Simultaneous interaction

The students will work as a group to synthesize and revise their individual worksheet responses into a group worksheet which will be the basis for their oral group presentation. Since students are working in small groups, more than one student will be participating at any one time.

7. Now that you have fully described your cooperative learning exercise, please explain briefly how you will decide whether or not your students have met the objectives you outlined above. How will you evaluate whether you have met your instructional objectives? What evidence will you collect?

I will be assigning grades for the individual worksheets, group worksheets, oral presentations, and individual follow-up papers (see attachments 4–7). The grades from the cooperative learning portion of the project (group worksheets and group oral presentations) will show whether the students met my learning objective of being able to synthesize and communicate health care reform policies. The final written paper is an individual extension of the group work which will allow me to judge how well the students can not only communicate but also apply their new knowledge to formulate their own positions.