THE COLLEGE FED CHALLENGE: AN INNOVATION IN COOPERATIVE LEARNING

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ABSTRACT

In this paper, we document and provide a framework for implementing the key elements of cooperative learning in a course on the College Fed Challenge. Our goal is to give instructors a straightforward framework for introducing and enhancing elements of cooperative learning in a wide range of economics classes. The College Fed Challenge is a competition at the district and national level where students present an update on current economic conditions, make forecasts, and provide a monetary policy recommendation. Advising College Fed Challenge teams provides a unique opportunity to implement and develop the five key elements of cooperative learning (Johnson et al. 2006). Specifically, summer and in-class preparations focus on individual accountability and small group social skills. Conducting mock presentations and mock question and answer sessions encourages positive interdependence, promotive interaction and group processing. Overall, we find that our students learn more economics, enjoy learning more, and develop skills transferable to the workplace.

Key words: Cooperative Learning, College Fed Challenge, Group Processing, Positive interdependence, Individual Accountability

JEL codes: A22, E52, E58

1. INTRODUCTION

Cooperative learning exercises, if structured well, can provide clear benefits for students in a wide range of in-class and experiential applications. In this paper, we document and provide an outline for implementing the key elements of cooperative learning in a course on the College Federal Reserve Challenge. While this course is not taught at many colleges and universities, the exercises presented below can be easily adopted in a number of courses ranging from principles of economics to intermediate macroeconomics to money and banking. Our goal is to give instructors a straightforward framework for introducing and enhancing elements of cooperative learning in their classes. In this paper, we provide direction for preparation, team-building and organization for participating in the College Fed Challenge. Overall, we have witnessed the achievements of our students first hand and truly believe that the benefits outweigh the costs to setting up and developing courses that involve cooperative learning exercises.

The paper is organized as follows. In section 2, we define cooperative learning and discuss the five key elements required by instructors so that students can successfully work together towards a common goal. The importance of cooperative learning and interdisciplinary background research and evidence of this approach is then presented in section 3. Section 4 and section 5 of the paper discuss the basics of the College Fed Challenge and the structure of the course which includes summer preparation, mock presentations and mock question and answer sessions, respectively. In section 6, we provide instructions for a scaled down variation on this cooperative learning exercise that can be introduced as a module in a larger class such as Money and Banking or Intermediate Macroeconomics. We present empirical evidence from our student evaluations that demonstrate that students do truly learn more and excel in this type of learning environment in section 7. We conclude in section 8.

2. WHAT IS COOPERATIVE LEARNING?

Cooperative learning according to Starting Point: Teaching and Learning Economics[1] "involves more than students working together on a lab or field project. It requires teachers to structure cooperative interdependence among the students." These structures involve five key elements: 1) Positive Interdependence, 2) Individual Accountability 3) Face-to-Face (Promotive) Interaction 4) Interpersonal and Small Group Social Skills and 5) Group Processing (Johnson et al. 2006).[2]

Positive Interdependence*:* Positive independence is the idea that the final outcome of a group exercise is determined by the performance of all of its members. According to Johnson et al. (1998) there are three steps to structuring a task so that it includes positive interdependence: (1) have a clear measurable task, (2) have goal dependence and (3) include other types of positive interdependence, such as materials interdependence and information interdependence. Smith and Waller (1997) mention additional ways to promote positive interdependence: output goal interdependence, learning goal interdependence and role interdependence.

Individual Accountability: The essence of individual accountability in cooperative learning is "students learn together, but perform alone."

Face-to-Face (Promotive) Interaction: Face-to-face interactions include oral explanations of solving problems, discussing the nature of the concepts being learned, and connecting present learning with past knowledge.

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[1] Starting Point is an online tool to help economists discuss and implement innovation teaching ideas. http://serc.carleton.edu/econ/index.html

[2] See Kagan (2003) for PIES alternative list of 4 elements: Positive Interdependence, Individual Accountability, Equal Participation, and Simultaneous Interaction.

Interpersonal and Small Group Social Skills: Interpersonal and small group social skills include developing effective leadership, communication and conflict management.

Group Processing: To conduct group processing, students must be given time and procedures for analyzing how well their learning groups are functioning and how well social skills are being employed. These exercises can serve a number of important functions. In particular, reflecting periodically on short-term goals allows the group to improve teamwork, increase individual accountability, streamline the process of meeting deadlines and goals, and eliminate redundancies or other actions that hinder the group's progress (Johnson et al. 2006).

3. WHAT IS THE IMPORTANCE OF COOPERATIVE LEARNING?

There is a wide literature on the benefits of cooperative learning. According to Smith (1995), nearly 700 studies have attempted to measure the benefits of cooperative learning in terms of 3 major outcomes. These are achievement productivity, positive relationships and self-esteem. While these studies are summarized in Johnson et al (2006), we highlight key outcomes that relate to formal cooperative learning groups at the college level and then tie these activities to Hansen's proficiencies (Hansen 2009) and Bok's goals (Bok 2006).

Regarding achievement productivity, studies show that students learn more, remember it more and develop better critical thinking skills with the use of cooperative learning. For example, Barkley et al. (2005) note that students have more higher-level reasoning and individual achievement is greater than with competitive and individualistic approaches. Hansen's seven proficiencies can be achieved in an exercise in cooperative learning. In particular, with an upper division and formal group environment, higher order proficiencies such as applying existing knowledge, asking pertinent and penetrating questions, and creating new knowledge are clearly achieved.

Regarding relationships and self-esteem, it has been found that students who participate in a cooperative learning exercise tend to enjoy it. Additionally, groups which are diverse across ethnic, cultural, language, social class, ability level and gender groups also reported positive experiences with this form of pedagogy and indicate the richness and potential for implementation of cooperative learning (Johnson, Johnson and Smith, 1998).

From the students' perspective and employers' perspectives, both would like skills that are directly transferable to the work place including teamwork to solve complex problems. According to a survey conducted by Jones et al. (2009), they found 63 percent of economics majors want more discussion of real-world issues and almost half of all economics majors at liberal arts colleges chose the major because if offers the best job opportunities. Furthermore, students feel that preparing for work and the ability to communicate are areas of Bok's (2006) eight goals where they feel that professors need to increase the focus of their instruction. A well-structured cooperative learning exercise can clearly achieve these goals.

The benefits of the College Fed Challenge are numerous: After completing our College Fed Challenge courses, students are able to apply their experience to acquire internships, discover potential career paths, and hone skills of public speaking, logical thinking, writing, and analysis which are essential to successful integration into the global economy. Past College Fed Challenge members have credited their current careers to this course and are proof of the success of the cooperative learning as a high impact experiential learning experience.

4. WHAT IS THE COLLEGE FED CHALLENGE?

The College Fed Challenge is a competition at the district (early to mid November) and national levels (early December) where students present an update on current economic conditions, make a forecast, and give a monetary policy recommendation. Students create a

professional presentation of fifteen minutes and compete in front of a panel of judges consisting of academic and professional economists followed by a fifteen minute question and answer session. Hundreds of schools across the country participate in the College Fed Challenge competitions sponsored through the New York, Boston, Richmond, Philadelphia, and Chicago Federal Reserve District Banks. How professors teach, coach, and advise their student teams varies widely across institutions.[3] In this paper, we discuss how this course epitomizes an innovation in cooperative learning at both of our institutions: Lafayette College[4] and St. Lawrence University.

As the first round of the competition occurs in early November, the courses are taught in the Fall semester and typically have one or two instructors. Class size varies from 5 to 11 students and students can participate on the team for multiple years although course credit is limited to the equivalent of one upper division elective in economics. Students meet weekly for 3 hours in a classroom environment and regularly at least twice a week on their own outside of class. Instructors often help students organize these outside sessions, provide a brief agenda for work to be completed, and attend and contribute when possible.

The course syllabus sets weekly deadlines and lays out the grading scheme with weights for the various components of the class including readings, quizzes, preparation of the script, preparation of the slides, participation in the practice Q&A sessions, and overall participation

[3] At both Lafayette College and St. Lawrence University, the College Fed Challenge is taught as an economics elective with limited enrollment. At other institutions the College Fed Challenge is an extra-curricular activity.

[4] The College Fed Challenge team from Lafayette College won the National Championship in December 2009, was the runner-up in December 2010 and received honorable mention in December 2011.

effort during the semester (see appendix A for sample syllabus). Prerequisites for the class are largely coursework in intermediate macroeconomics, a strong interest in monetary policy, and a recommendation from a faculty member. Only 5 students may participate as speaking members of the team and a university may only send one team to compete. Thus, the remaining members play a supporting role.

5. ASPECTS OF COLLEGE FED CHALLENGE COURSE AND LINKS TO COOPERATIVE LEARNING

The five key elements to structuring a successful cooperative learning exercise are evident in a number of activities of our College Fed Challenge courses. Below are examples of specific elements in our classes and their connection to cooperative learning.

A. SUMMER PREPARATION

Lafayette College selects its College Fed Challenge team and gets organized in mid-March and has several meetings so that the team can meet and begin to coalesce. Over the summer, students read a textbook on money and banking[5] and complete online quizzes. The online multiple choice quizzes guarantee that the students keep up with the summer reading and also that they have a basic understanding of how the Fed, financial markets and financial intermediation work. The questions cover definitions of key terms such as moral hazard, the Fed Funds rate and the yield curve, and key models such as the Taylor Rule, aggregate demand and aggregate supply and the loanable funds market. In addition, the students are asked to read the statements and minutes from the Federal Open Market Committee (FOMC) meetings and

[5] The students at Lafayette College use Laurence Ball's Money, Banking and Financial Markets (2nd edition).

speeches from Fed officials and contribute to discussion boards. As professors, our main goal is to get students to similar starting points in terms of knowledge about macro-monetary economics and Fed policy by the first week of the semester so that the students can start tackling the major issues policymakers are confronting. See Box 1 for an example of a summer assignment.

During this preparation phase of the College Fed Challenge, the requirements to complete online quizzes and contribute to discussion boards make the students individually accountable for the material. Students are also developing their small group social skills via interaction on the discussion boards.

B. COURSE STRUCTURE IN THE FALL SEMESTER

I. IN CLASS PREPARATION

Over the course of the semester the students are engaged in reading many different sources to bring them up to speed on the current state of the US economy. The students are expected to read the Wall Street Journal and the Economist. As a class we read and discuss speeches by Federal Reserve officials, the minutes and statements of the FOMC and blogs by macroeconomists. Our method to test our students' understanding of such material is to ask them pointed questions about the readings and then allow them to ask and answer questions from each other where the instructor serves as a guide to the discussion but not the expert. These activities extensively use positive interdependence, individual accountability and small group social skills. These types of class meetings are more prevalent at the beginning of the semester while the students are knowledge-building.

II. MOCK PRESENTATION

In the two months leading up to the College Fed Challenge competition, the College Fed Challenge Team gives mock presentations to a number of groups both on and off-campus.

During these exercises, the students have an opportunity to practice delivering a work-in-progress presentation and to get immediate feedback from their audience. The final product is a formal communication of the state of the economy, a forecast with risks, and a recommendation for monetary policy which lasts approximately 15 minutes and is accompanied by a PowerPoint presentation[6].

In the earlier weeks of the semester, before the official presentation team is assigned, all members of the team are asked to participate in a trial-run presentation to the team advisors and perhaps another professor. Since the audience is small and fairly familiar, the students can feel relatively comfortable taking risks in their presentation style. In addition, they do not need to worry about the strict time limit, the smaller details regarding their charts and graphs, and at the end they are free to ask questions of faculty and other students.

As the semester progresses, the presentation team is selected and mock presentations become more formal and the audience grows. The College Fed Challenge team clearly develops confidence and experience with public speaking in front of tough judges in addition to practice with student mentors on campus. These larger audiences include economics professors, campus newspaper reporters, local bankers, those with ties to the Fed, parents, alums of the College Fed Challenge, and other students.

These mock presentations clearly emphasize all five elements of cooperative learning and students are essentially judged by their audience and given immediate feedback regarding their strengths and weaknesses. The students' style and knowledge evolves considerably after each

[6] See appendix B for sample presentation and script materials and links to online videos from past competitions.

presentation and the iterative process involved in creating, re-creating, reflecting, editing, revising, practicing and delivering should not be underemphasized for its role in group processing and its importance in the real world.

Most importantly during the development of the presentation promotive interaction is occurring in every class session and in the meetings of students outside of class. Students provide the professor and each other with oral explanations of how they have interpreted the data and economic news. As a group we discuss the main ideas being considered for the presentation thereby discussing what they are learning. Overall, the team is continually making connections between our analysis of the US economy today and our past courses, previous readings, and summer preparation.

III. MOCK QUESTION AND ANSWER

At the competitions, many teams have very well polished presentations so the ability to differentiate largely takes place during the question and answer session. Prepping the question and answer session is a fairly difficult task because the judges' questions can come from monetary history, monetary theory or the current economic situation. Therefore, students need to be conversant in all areas and make connections across history, theory and current events to effectively and efficiently respond to the questions.

With guidance from the professors, the students divide up the topics so that they cover all the course material. See Box 2 for a sample division of topics from Lafayette College. While the professor can assign the division of labor we merely suggest that the students divide and conquer the course material. It is beneficial for students to experience critical points in the process where they find that they will be able to streamline the preparation and optimize the joint outcome if they divide the labor between students. This process reinforces small group social skills.

There are several types of mock question and answer sessions: those initiated by the professors, by the students and by other faculty and experts. The sessions led by the professor occur during class time and can last a whole class period. The professor gives both toss-up questions (anyone can answer) and directed questions (specific to a particular team member). See Box 3 for sample questions.

The student led question and answer sessions are structured so that students bring questions to meetings the students have outside of class (typically 2 to 5 times a week). There they quiz each other. The students jointly are responsible for coming to an answer.

Finally, questions from people outside the course are often helpful. This mock question and answer session is linked with the mock presentations that students give before the competition. Questions from outside faculty and community members can help students focus on questions that may be more atypical and more general than those generated by their professors and teammates.

Both the development of the script (Section B.II above) and responses to questions (Section B.III) require students to meet outside of class where they critique each others' presentation styles and responses to questions, and gather and analyze data for the PowerPoint presentation. Students determine a policy recommendation while working on developing a script and PowerPoint presentation and during this process gain from positive interdependence. This positive interdependence takes several forms: output goal interdependence is achieved by producing a single presentation; learning goal interdependence is achieved since each member of the team (both official and unofficial) can answer questions about the US economy, monetary policy and the policy recommendation made by the group; and role interdependence is achieved

since each member of the team is responsible for a certain portion of knowledge about monetary theory, monetary history, and financial markets.

In addition, there is an inherent give and take that goes on during this process as students have their own ideas and policy preferences coming into these discussions. Students learn how to communicate with each other and effectively work as a group without giving up their individual styles. This often means students learn how to work with students with different personalities or styles than their own improving their small group social skills. Another aspect that some students develop is leadership. Each year there are generally several students who return from the previous team to compete again. These returning students take on a leadership role since they have been through the process enhancing their small group social skills.

IV. MONITORING AND REFLECTION OVER THE SEMESTER

There is also student to student monitoring that is done informally throughout the semester. Students make sure each one is carrying her own weight. For the College Fed Challenge teams, the advisors monitor students during the semester and give students feedback on how their actions are affecting the group. This involves making sure each student is contributing and avoiding free riding. Therefore, throughout the semester there is group processing where both the professors and the students are giving each other feedback.

At the end of the semester, the advisors take a class period and ask for feedback from the students about the course. This is the opportunity for the students to suggest changes to the course that will positively affect the future iterations of the course.

6. INCORPORATING INTO LARGER CLASSES

A scaled down version of the College Fed Challenge can be incorporated as a cooperative learning exercise in a Money and Banking or Intermediate Macroeconomics course. The

instructions of the exercise are largely similar except the time frame is shorter and the teams track only one sector of the economy and are give a much more specific set of questions to prepare for. Appendix C contains the instructions from a Money and Banking course at St. Lawrence University and a list of sample questions for the students.

In the first presentation (5-minutes) on data and current conditions in the sectors, students extract their data series, construct an original graph, discuss the background on the data series and analyze their data. These presentations include the source, strengths, weaknesses, history, and some methodology of the specific series.

In the second presentation, students have had time to synthesize the material covered in class and to apply economic theory to their analysis. Their presentations are more in-depth and give a recommendation for monetary policy that utilizes the tools developed in class and the recommended readings on the current state of traditional and non-traditional monetary policy. Questions regarding the Fed, monetary policy and macroeconomics come from a select list of pre-determined questions in addition to those asked by the judges derived from the content of the presentation itself. Each group is asked approximately 2-3 questions at random from the pre-set lists and students are given suggested readings to help them prepare and are allowed to bring notes. These questions are also likely to be reinforced on the final exam.

7. EMPIRICAL EVIDENCE

One way to evaluate student learning is to examine course evaluations to find out what students think about the course and the effort that they put into the course. Effort or engagement is correlated with learning. Students who are more engaged in a course or exert more effort in a course tend to have greater command of the course material (Carbonaro, 2005). We have course

evaluation data for three years from Lafayette College and four years from St. Lawrence University. The data from both sets of evaluations tell a similar story.

First, at Lafayette College, we can compare the College Fed Challenge course to other upper division economics electives (Tables 1A, 1B and 1C). From this data, we can draw several conclusions that support our hypothesis that students learn more in the College Fed Challenge course than in other economics electives.

1. Examining the first three questions on the evaluations, we can see that students think that the course and the content are close to excellent.[7] In addition, the students' perception of the amount that they learned was 5, 4.93 and 4.83 out of 5 in 2009, 2010 and 2011, respectively.
2. Examining the next four questions the students are asked to compare intellectual challenge, effort put in, effort to succeed and involvement of the College Fed Challenge to other course they have taken at Lafayette.
    a. Students rated the College Fed Challenge 21% to 37% more intellectually challenging than over economics electives.
    b. Students noted that they put in to the College Fed Challenge 28% to 36% more effort than other economics electives.
    c. Students noted that the College Fed Challenge required 22% to 37% more effort to succeed.
    d. Student involvement in the College Fed Challenge was 28% to 38% greater than in other economics electives.

[7] The scores were between very good (4) and excellent (5) with most scores closer to 5.

3. Examining the final two questions, there is a large and substantial difference in the amount of time students spent working on the College Fed Challenge and the amount of time students viewed as valuable versus other economics electives. Students spent 142%, 215% and 168% in 2009, 2010 and 2011, respectively, more hours relative to other economics electives. Students viewed as valuable 100%, 88% and 78% of the hours they worked in 2009, 2010 and 2011, respectively. Compare that to 77%, 80% and 65% of the hours worked in economic electives in 2009, 2010 and 2011, respectively.

Second, at St. Lawrence University the courses are evaluated using a different form. Therefore, the Lafayette College data and St. Lawrence data cannot be directly compared. From examining the two most relevant questions from the St. Lawrence University course evaluation form we can draw similar conclusions. First, 96.8% of students who have taken the College Fed Challenge course stated that the course had high educational value. Second, looking at intellectual challenge, 61.3% of the students rated the intellectual challenge higher than average and 35.5% rated the intellectual challenge just about average[8].

While this analysis relies on the connection between effort, intellectual challenge, and learning we can draw some strong correlations that students who participate in the College Fed Challenge work harder and are more intellectually challenged than in other courses. Therefore, it seems likely that the College Fed Challenge participants learn more than their peers in a more

[8] Compared to other St. Lawrence University courses. This table complies the results from four sets of course evaluations, which covers from 2008 to 2011.

traditional classroom setting and the cooperative learning elements may be a positive contributor to that enhanced learning.

8. CONCLUSIONS

The College Fed Challenge provides an opportunity for students to have an in-depth cooperative learning experience in economics. The students involved learn more economics and benefit from the course through enhanced opportunities in the workplace and graduate school. However, not all College Fed Challenge teams may work well together and the professor designing a College Fed Challenge course must be aware of the five elements of cooperative learning (individual accountability, positive interdependence, promotive interaction, interpersonal and small group social skills and group processing) and understand how course activities fit within those elements of cooperative learning. Also, professors need to monitor, provide feedback to students and receive feedback from students about the various aspects of the course to have a flourishing team. Most importantly, professors need to set the rules of the game as in any cooperative learning activity.

Overall, the College Fed Challenge provides students with a unique and powerful opportunity to learn economics through a semester long cooperative learning exercise. At both Lafayette College and St. Lawrence University, we have seen students mature and grow intellectually through our College Fed Challenge courses. In addition, both professors and students of the College Fed Challenge agree that the experience is truly invaluable and we continue to see long-term impacts on our former students.

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Table 1A: Lafayette College Fall 2009 Course Evaluations		
	300-level electives	Fed challenge
Question:	Median Avg.:	
1. The course as a whole was:	3.64	4.67
2. The course content was:	3.69	4.33
18. Amount you learned in the course was:	3.66	5
Relative to other college courses you have taken:		
24. The intellectual challenge presented was:	4.90	6.13
25. The amount of effort you put into this course was:	4.81	6.33
26. The amount of effort to succeed in this course was:	4.87	6.67
27. Your involvement in course (assignments, attendance, etc.) was:	4.85	6.67
28. On average, how many hours per week have you spent on this course, including attending classes, doing readings, reviewing notes, writing papers and any other course related work?	5.79	14
29. From the total average hours above, how many do you consider were valuable in advancing your education?	4.70	14
Scale on Questions 1, 2 and 18	Very Poor=0, Poor=1, Fair=2, Good=3, Very Good=4 and Excellent=5	
Scale on Questions 24, 25, 26 and 27	Range is from 7= much higher to 1= much lower, average = 4	
Scale on Questions 28 and 29	Hours	

Table 1B: Lafayette College Fall 2010 Course Evaluations		
	300-level electives	Fed challenge
Question:	Median Avg.:	
1. The course as a whole was:	4.02	4.7
2. The course content was:	4.05	4.7
18. Amount you learned in the course was:	4.06	4.93
Relative to other college courses you have taken:		
24. The intellectual challenge presented was:	5.09	6.17
25. The amount of effort you put into this course was:	5.23	6.7
26. The amount of effort to succeed in this course was:	5.32	6.5
27. Your involvement in course (assignments, attendance, etc.) was:	5.25	6.7
28. On average, how many hours per week have you spent on this course, including attending classes, doing readings, reviewing notes, writing papers and any other course related work?	6.19	19.5
29. From the total average hours above, how many do you consider were valuable in advancing your education?	5.19	17.5
Scale on Questions 1, 2 and 18	Very Poor=0, Poor=1, Fair=2, Good=3, Very Good=4 and Excellent=5	
Scale on Questions 24, 25, 26 and 27	Range is from 7= much higher to 1= much lower, average = 4	
Scale on Questions 28 and 29	Hours	

Table 1C: Lafayette College Fall 2011 Course Evaluations		
	300-level electives	Fed challenge
Question:	Median Avg.:	
1. The course as a whole was:	4.05	4.83
2. The course content was:	4.09	4.83
18. Amount you learned in the course was:	4.14	4.83
Relative to other college courses you have taken:		
24. The intellectual challenge presented was:	5.05	6.93
25. The amount of effort you put into this course was:	5.03	6.83
26. The amount of effort to succeed in this course was:	5.17	6.92
27. Your involvement in course (assignments, attendance, etc.) was:	5.13	6.83
28. On average, how many hours per week have you spent on this course, including attending classes, doing readings, reviewing notes, writing papers and any other course related work?	6.15	16.5
29. From the total average hours above, how many do you consider were valuable in advancing your education?	4.56	13.5
Scale on Questions 1, 2 and 18	Very Poor=0, Poor=1, Fair=2, Good=3, Very Good=4 and Excellent=5	
Scale on Questions 24, 25, 26 and 27	Range is from 7= much higher to 1= much lower, average = 4	
Scale on Questions 28 and 29	Hours	

Table 2: St. Lawrence University Course Evaluations: 2008-2011

Has this course been a valuable educational experience?	# of Students Who Indicated	# of Students Who Indicated	Percentage
High Educational Value	30	31	96.8%
Low Educational Value	0	31	0.0%
No Expression of Educational Value	1	31	3.2%

How intellectually challenging was this course?	# of Students Who Indicated	# of Students Who Indicated	Percentage
Higher than Average	19	31	61.3%
Just About Average	11	31	35.5%
Lower than Average	1	31	3.2%

Box 1: Discussion board assignment from 2012 posted in Moodle.

Read the FOMC statement from Wednesday, August 1. Also consult speeches, testimony, other Fed documents and data releases such as real GDP, unemployment and inflation.

Post on the discussion board answers to the following two questions. Post is due by August 13th.

1. What is the most important issue facing the Fed now? Why?

2. What topic/issue do you think the Fed should address at its next FOMC meeting? Why?

Read your team members posts and provide at least 1 response in agreement or disagreement. Your response is due August 20th.

Box 2: Example of division of topics

Assignment 1: Basel III, Frank-Dodd Bill, Sovereign debt issues in Europe
Assignment 2: Balance Sheets, Recession Liquidity Programs, Great Depression
Assignment 3: Peter Diamond "Search Theory", Mortgage Backed Securities
Assignment 4: Japan, Fed Reserve Acts
Assignment 5: Structural Unemployment, Inflation

Box 3: Example of mock questions

1. What is the fed funds rate and how is it determined?
2. What are the instruments, intermediate targets and ultimate targets of monetary policy?
3. What are tools of the exit strategy from quantitative easing?
4. How much of the rise in unemployment is due to the extension of unemployment compensation? What evidence do you have?
5. The price of gold has been rising, what does it indicate may happen in the future?
6. How is the current US economy similar and different from Japan in the mid-1990s?

Appendix A: Sample syllabus

Economics 410/411: MONETARY POLICY

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St. Lawrence University
Fall 2011

Class Schedule: Fed Challenge (Econ 410/411) Monday 1:45-4:45 in Hepburn 12
M/W/F10:50-11:50 (Econ 100D) in H112
M/W/F 12:00-1:00 (Econ 100E) in H112
Office hours: Tuesday 1-2:30; W 9-10am; Friday 1-2:30pm, and by appointment

Course Description: The goals for this course are for students to learn monetary theory, to keep up-to-date on current economic conditions and to prepare for a college level competition titled "The Fed Challenge." The Fed Challenge is a competition sponsored by the Federal Reserve System, in which teams of students from participating colleges and universities present monetary-policy analyses to a panel of judges at regional Federal Reserve Banks and regional winners advance to a national competition at the Federal Reserve Board in Washington, DC. It is an excellent opportunity for students to develop professional skills such as a strong knowledge of macroeconomic and financial data, solid command of software to create charts and presentation materials, and extensive practice of oral communication skills.

Readings: Readings will be assigned during the semester and will be available online. As background reading, please refer to the book "Purposes and Functions" http://www.federalreserve.gov/pf/pdf/pf_complete.pdf, the website "Fed 101" http://www.federalreserveeducation.org/fed101/index.htm?CFID=4121049&CFTOKEN=64121048 and the pamphlet "The Fed in Brief". We will also make extensive use of articles in class from the *Wall Street Journal*, *New York Times* and *Dismal.com*. A requirement of this course is that you keep up to date with the latest monetary and financial developments affecting the U.S. economy.

Prerequisites: Economics 200 or Math 113; Economics 251; and Economics 252.

Course Requirements, Exam Dates, and Grading: Grades for the course are based on weekly assignments, attendance, and the preparation for the Fed Challenge competition. Final grades are determined as follows:

Weekly Assignments	25%	(drop one)
Attendance	25%	(drop one)
Presentation: Script/Slides	50%	
	100%	

Fed Challenge Fall 2011 Schedule

August 29 -- Week 1: Introductions, Background Info on Fed Challenge, Watch Previous Fed Challenge video, Hand out Materials

September 5 -- Week 2: Set up Binders, Watch Selected portions of team videos, Choose Sectors
Tentative Assignment: Read Fed Challenge Teacher's guide (http://www.newyorkfed.org/education/fedchall.pdf), Research sectors, come in with preferences and one-paragraph typed summaries of your sectors.

September 12 -- Week 3: Discuss sectors and Data Release Dates, Present first sector summaries, critique from instructor and peers
Tentative Assignment: Research assigned sector, come up with list of indicators to monitor, draft summary of current conditions for each sector

September 19 -- Week 4: Review Fall 2010 script/slides, present updated sectors with graphs, critique
Tentative Assignment: Revise summaries, draft graphs for each sector (4)

September 26 -- Week 5: Discuss policy recommendations.
Tentative Assignment: Revise summaries; add policy recommendation for next FOMC meeting

October 3 -- Week 6: Work on compiling script. First read through.
Tentative Assignment: Revise sectors and put into form appropriate for script (include where graphs will be)

October 10 -- Week 7: Continue to update script and work on compiling PowerPoint slides.
Tentative Assignment: Research relevant theory to support sector data trends and what is in script (include theory as well as speeches and papers from Feds). Start work on Q &A.

October 17 -- Week 8: Continue to update script and slides. Second read through. Time and make adjustments as necessary.
Tentative Assignment: Update sectors and continue to rehearse script. Work on Q &A. Update graphs and data.

October 24 -- Week 9: Continue to update script and slides. Third read through. Time and make adjustments as necessary.
Tentative Assignment: Update sectors and continue to rehearse script. Work on Q &A. Update graphs and data.

October 31 -- Week 10: Watch DVD of previous year again, rehearsal
Tentative Assignment: Last minute changes, updates, and preparation

November 7th/8th-- Fed Challenge! (Still confirming the date/place details)

Appendix B: Samples script and presentation

2011 Lafayette College Federal Reverse Challenge Script: First 2 Minutes

Kirtika: Chairman, we only have a few moments before your congressional hearing to review the present state of the economy and future course of monetary policy. As you know, the Federal Reserve has a commitment to stable prices and maximum employment. Currently, core PCE inflation is 1.6% and the unemployment rate is 9.0%. Given the high unemployment rate, I'm concerned that we are not meeting our dual mandate.

Andreas: I share your concern. In recent quarters, real GDP growth has been between 1-2%, and is forecasted to be between 2-3% for 2012, so, we might need to consider additional monetary policy accommodation. But first, I'd like you as members of my staff to review the policies that we have already used, and assess their effectiveness.

Kelly: As a primary tool, the Fed has set the target federal funds rate between 0 and 25bps since December 2008 which helped improve liquidity in credit markets. Despite this, credit standards have remained historically tight.

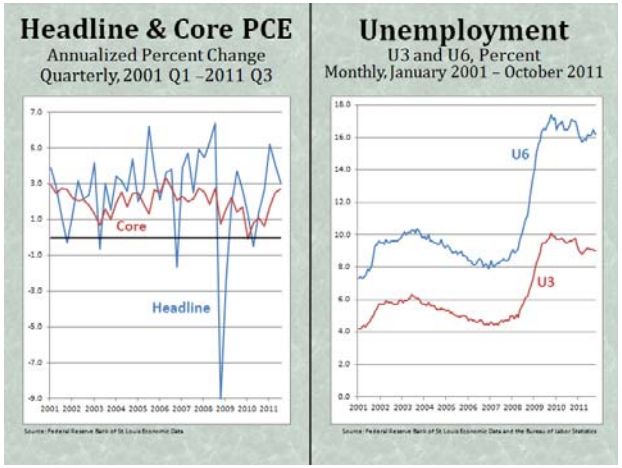
Amira: The fed also executed two rounds of large scale asset purchases. In the first round we purchased treasuries and mortgage backed securities to support credit markets by providing liquidity to the private sector, especially the housing market. In the second round, we purchased long-term Treasuries to drive down yields on longer-term bonds and to counter deflationary pressures.

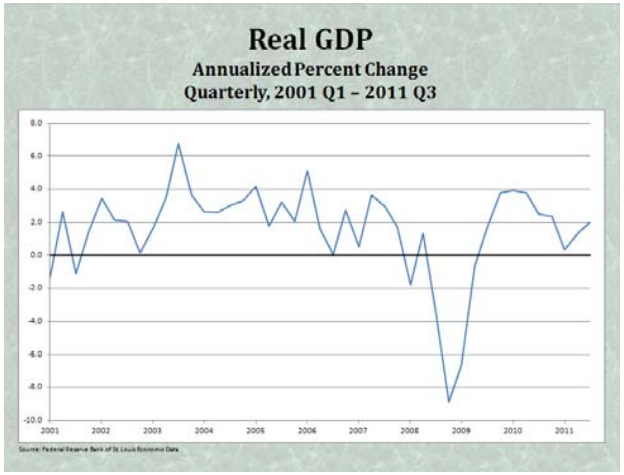
Miao: While these actions appreciated asset prices and lowered long-term rates, the aid to the housing market has been less effective than we hoped due to the excess supply of housing, the decline in household wealth, and the deleveraging of households.

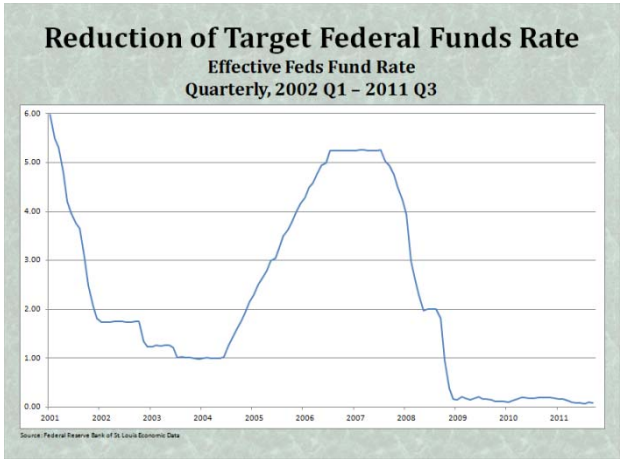
Kirtika: The estimated effects of the second round of large scale asset purchases was a reduction of 10 year Treasury yields by approximately 15 to 20bps. But the sovereign debt crisis in Europe and the domestic debt ceiling debate have added to banks' risk aversion. This aversion has reduced banks' willingness to extend credit and has thus contributed to tighter credit markets.

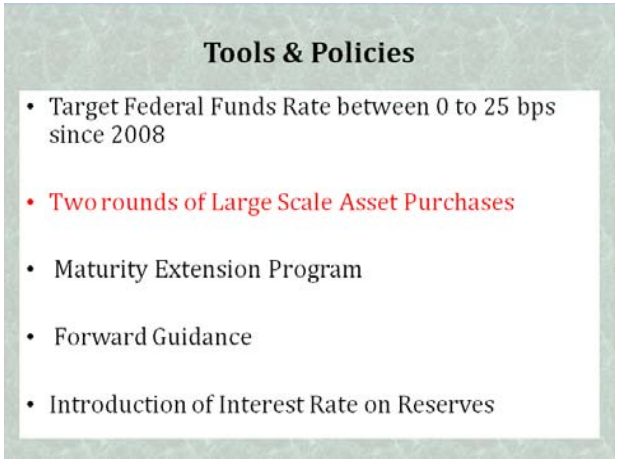
Amira: Although these large scale asset purchases brought down long-term interest rates, the recovery remains weak. This can be attributed to the slack in the labor market in the aftermath of the financial crisis. Persistent labor market weakness has resulted in slow growth in wages and salaries causing a drag on consumption. Therefore, in September we introduced the Maturity Extension Program with the goal of further pushing down longer term yields.
[2:08]

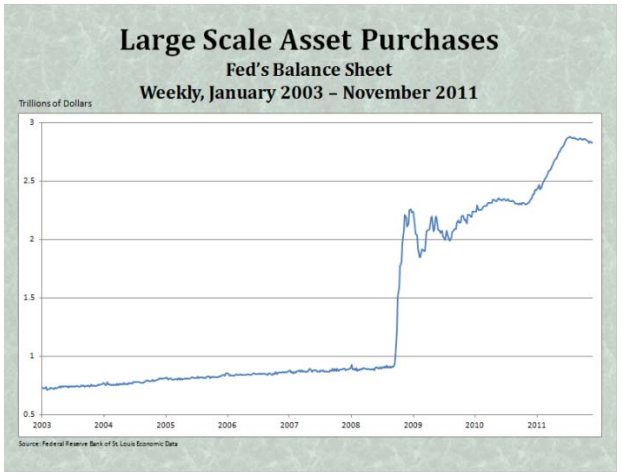
2011 Lafayette College Federal Reserve Challenge Slides: First 2 minutes

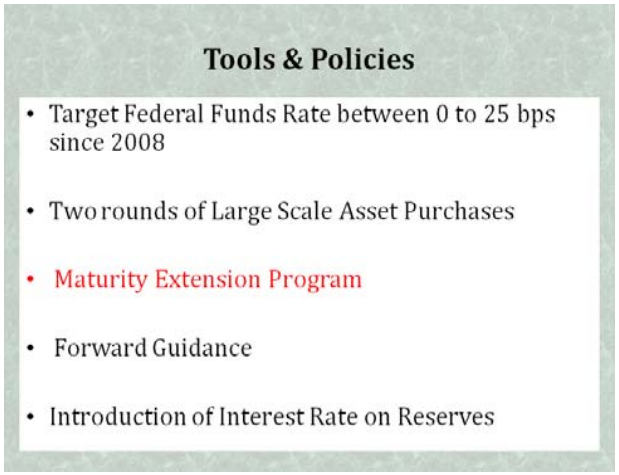












Fed Challenge 2011 videos:
http://www.youtube.com/watch?v=vthbmHDJESk&feature=results_main&playnext=1&list=PL7D1E1A1E47C3C8B3
General videos by the Fed including Fed Challenge:
http://www.youtube.com/user/FedReserveBoard/videos

Appendix C: Instructions for in-class version of College Fed Challenge

The Fed Project is a briefing (or presentation) to the FOMC; the goal is to expand your understanding of the Federal Reserve System's unique role in the economy and the importance of Federal Open Market Committee decisions.

The class will be divided into four or five-member teams. Each team will undertake research and analyze data about current and near-term economic conditions in a specific sector. Based upon their understanding of the current and future state of the economy, the team will recommend a specific course for monetary policy. Each student is expected to track one data series for the remainder of the semester. Each group will give a short (5-minute) presentation in week 11 or 12 of the semester with the current conditions in the sector. In the final week of the semester, the student teams will make 10-minute presentations before a panel of judges. Each team will be prepared to answer a variety of questions from the judges about both their research and general Federal Reserve information. A copy of the transcript of the prepared remarks will be submitted on the day of the presentation. The final presentation must include: an update of current economic conditions in the sector; a near-term forecast of economic conditions that may affect monetary policy; and a recommendation as to the action the Fed should take with regard to short-term interest rates.

Sample list of questions given to students in advance to prepare for in class version

1. What is the fed funds rate? Why and how does the Fed use it?
2. How does the Fed manage the money supply?
3. Should the Fed be concerned about fluctuations in the stock market? Explain.
4. What are the basic objectives of the Fed?
5. The Fed targets the federal funds rate. What's the connection between that rate and mortgage rates? In other words, what's the connection between short-term and long-term interest rates?
6. Often there is discussion on the issue of the Fed's accountability and transparency. How much should the FOMC reveal?
7. What are the advantages/disadvantages of inflation targeting? Do other central banks specify inflation targets?
8. It is often said that lower inflation is better than higher inflation. What's wrong with high inflation? What is wrong with deflation?
9. Why is some unemployment good? Should unemployment be zero? Can it be too low?
10. Is the Fed really independent? Discuss.