



## **EXPERIENCES OF USING A LEARNER-CENTERED APPROACH IN PRINCIPLES OF ECONOMICS**

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### **Abstract**

A working assumption in the paper is that the purpose of the initial course in Principles of Economics is to enhance the student's capacity for effective behavior through economic education. The continuous improvement philosophy associated with Quality Management is used as a guide for adopting a learner-centered approach. Experiences with efforts to implement this approach are briefly described with comments about perceptions of successes and failures. Student comments on how to improve the learning process are presented along with student ratings of the effectiveness of selected learning techniques.

### **Experiences of Using a Learner-Centered Approach in Principles of Economics**

#### **Introduction**

Most economic instructors want to improve the effectiveness of their efforts in teaching a Principles of Economics course. Most students want to succeed rather than fail. If these assumptions are accepted, two prominent questions arise. What is the purpose of a Principles course? What is the best way to achieve this purpose?

Clarity of purpose is an essential element in any effective improvement effort. An answer to the "purpose" question is not always obvious. Perceptions range from 'cover the text' to 'achieve skill in evaluating economic issues in a global context'. In fact it is not always clear who should or can decide the purpose question. Is this an individual instructor prerogative or a collective departmental decision or possibly an administrative call? What is clear is the critical importance of recognizing and accepting the rationale for offering and requiring a Principles course. Stated in the vernacular, "It is difficult to get the herd headed West if you're not sure where West is". At the author's institution, the purpose of a Principles course is to enhance the student's capacity for effective behavior through economic education.

Once student learning is recognized as the rationale for a course, the instructor's role should become one of facilitating the learning process. This change was made by the author after some twenty years of employing a teacher-centered, lecture methodology. A continuous improvement philosophy served as the initial guide for making the transition to a learner-centered approach. Elements of this philosophy include students having a more active role in the learning process and a meaningful role in classroom decision-making. Other elements involve monitoring the learning process through systematic data collection, the prudent use of this feedback, and viewing the learning process in a systems context.

The power of students working with other students emerged in the early efforts to implement a learner-centered approach. Much experimentation was conducted in forming, structuring and utilizing small group activities in class. While in-class group assignments were central to the newly evolving learning methodology, these were only part of the new approach. What follows is a description of one instructor's efforts to improve the learning process.

### **Successes**

While experimentation with the new approach in the classroom began in the mid-1990s, it was about two years before any real success could be claimed. Expectations were that students would be enthusiastic about having more involvement in the learning process. It should have been obvious that after 13 years or more of the conditioning of formal education, students would be resistant to change. They had become comfortable with the passive role often assigned them. After reducing lecture time to no more than half of a class period, there were complaints that the instructor did not lecture enough. Thus a first lesson was the realization that understanding more about the change process was a pre-condition to success.

After about two years of trying to implement the new approach without much success, a really fresh idea emerged – why not ask the students what was helping to improve their learning. It became a standard procedure to ask students to respond anonymously in writing to the following question: “What can we do to improve learning in this course?” Initially, this question was asked about every three weeks. Some responses near the end of the semester were: “Quit asking this question all the time”. Now the question is asked after the first four weeks of a semester. The responses are compiled and shared with the students. This feedback and actions based on the suggestions are critical to maintaining the integrity of the student-teacher relationship.

Some students do include themselves in the “we” of the question. Many respond in terms of what the instructor can do to improve learning or what will improve their grade. Table 1 includes the most frequently mentioned improvement ideas for a recent five year period. Items listed were mentioned by at least 5 students in a given class.

**Table 1**

Most Frequently Mentioned Learning Improvement Ideas  
(Fall terms, 1998, 2000 – 2002, Spring 2003, n=182)

Instructions: Answer or comment on the following question: “How can we improve learning in this course?”

<u>Times Mentioned</u>	<u>Item</u>
<u>30</u>	Students need to study more.
<u>24</u>	Need to work more in small groups.
<u>23</u>	Keep same course format.
<u>22</u>	More coverage of terms and text material.
<u>21</u>	More real-world and current examples.
<u>18</u>	More class participation and discussion.
<u>17</u>	Clearer exam questions.
<u>14</u>	Frequent quizzes good.

It is encouraging for students to acknowledge that effort on their part is essential to improving learning. Use of small discussion groups is consistent with more student involvement. First attempts at using these groups in class were well received by students but learning results were ambiguous. Several modifications to the group discussion process have met with some success. Five seems to be the largest number of students in an effective discussion group while three is a minimum. Four to five students in a group is probably optimal. A variety of approaches to forming groups have been used. For some assignments a convenience grouping such as adjacent seating or a numbering process is adequate. Other activities such as group quizzes seem to function better if grouping is designed. Diversity in learning styles, sex, age, ethnic background and cumulative grade point average can be used to form effective groups. There does not seem to be a magic bullet formula for forming groups.

It is clear that groups should be given specific objectives for the discussion and be required to report their results to the instructor and/or to the rest of the class. A process for identifying one student as discussion facilitator should be in place. One technique that seems to get most students involved in discussions is to require all students in a group to be prepared to report that group’s results. Time allowed for the small group discussion is also important. Five to eight minutes is optimal for many assignments that seem to benefit from group discussion. The integrity of the discussion process often deteriorates rapidly after about eight minutes. Assignments for discussion include such items as case material in text, current topics, handout exercises and quizzes. Total time allocated to small group discussion activity is about fifteen minutes per class. This type of activity is used in most of the semester class meetings.

During the course, quizzes are given in both individual and group formats with no advance notice of the format. When quizzes are taken in groups, the basis for awarding individual points varies. Sometimes the group turns in one quiz and each member

receives the same number of points. At other times each student can submit a separate quiz for grading. Individual semester grades are based on point totals for the individual student.

On the first day of each semester students are asked to think about why they are taking the course and why they should take the course. They are asked to describe their most effective learning experience to date. Emphasis is given to the need for students to take charge of their own learning and to seriously consider committing to the goal of lifelong learning. Students agree that just attending class, skimming the material and cramming for exams is not an effective way to learn. They are urged to consider changing to a proactive mode which includes preparing for each class and fully participating in class. They acknowledge that in the long run learning is far more important than grades.

Perhaps modeling is the strongest communication to students an instructor can make. Students are aware from the beginning this course is “different”. The initial data gathering with feedback and emphasis on learning is a clear signal. Small group activities are becoming increasingly popular in many undergraduate courses but taking quizzes in groups is probably not that common. Being asked how to improve learning and then having their ideas implemented is a first for some students. Openly discussing with students what is working and what is not reinforces the focus on learning. Some of the feedback on how well students are benefiting from the new approach comes from the caliber of questions they ask and answers they give to discussion questions.

### **Failures**

One of the biggest mistakes made in the first efforts to implement a new approach was attempting to do too much. Course content definitely suffered at the expense of an emphasis on methods. In order to involve students more in the learning process during classes it was decided to limit lecturing to one-third of any given class period. Preparation time for class was almost totally dedicated to how best to conduct class rather than how to be a helping participant.

Involving students in the process of developing a mission statement for the course seemed like a creative idea. This was first attempted in a senior level economics course and met with mild success. Course objectives were then developed based on the course mission. Attempting this same approach in the Principles course bombed. Students do need to understand the course objectives and, ideally, to accept the goals for the course. Commitment to these objectives, however, is another matter.

Students were encouraged in a variety of ways to change from being a passive learner to becoming an active one. Material was borrowed from Stephen Covey’s *The 7 Habits of Highly Effective People* (1989) and presented to students as both a reason for and a means to change. While a majority of students agreed with Covey’s ideas, the impact of these guidelines on behavior was not readily apparent. It is, of course, possible that the seeds sown now will grow at some future time.

Part of the process of controlling one's own learning is developing the capacity for self-assessment. Attempts at promoting this skill included requiring students to grade their work based on given criteria, and to grade the work of fellow students. This approach appeared to succeed in helping students do a better job of self-assessment. However, it was highly unpopular and seemed to have a negative spillover effect. In another case, students were required to grade themselves on class preparation and participation during a semester. Periodically these grades were submitted to the instructor and were discussed in class. Roughly twenty percent of the students took the self grading assignment seriously.

In the early experiences with small group discussions, a major mistake was made. Students were simply asked to discuss a given topic and allowed about fifteen minutes for the assignment. Assignments are much more effective when they are specific and require the group to provide an answer or recommendation. As pointed out earlier, the optimal time for many of these discussions seems to fall between five and eight minutes.

Probably the most unpopular experiment in the Principles course involved the frequency of exams. In one context, exams can be viewed as an example of an attempt to do quality control by inspection. In order to avoid this pitfall and in the spirit of focusing on learning rather than grades, only one exam that represented 25 percent of the semester grade was scheduled at the end of the course. While some twenty quizzes were given during the fifteen weeks of class meetings, the absence of exams was very unsettling to most students. In fact, the student reaction is better characterized as hostile. Needless to say, this was a one semester experiment.

### **Additional Feedback and Comments**

For five consecutive fall terms students were asked to rate selected items on how well these techniques helped the learning process. The ratings were anonymous and were collected at the end of each semester from one section of Principles of Economics.

**Table 2**

Ratings of Course Learning Techniques in Principles of Economics  
(Fall terms, 1999 – 2003, n=196)

Instructions: Please rate the following items on how effective they were in helping you learn in this course. Rate each item on a scale of 1—5 with 1 designating NOT EFFECTIVE and 5 designating VERY EFFECTIVE.

<u>Rating*</u>	<u>Item</u>
<u>4.16</u>	Frequency of quizzes.
<u>4.08</u>	Review list for exams.
<u>4.0</u>	Class handouts/exercises.
<u>3.67</u>	Instructor's lectures and explanations.
<u>3.63</u>	Balance between lecture and class discussion.
<u>3.56</u>	Time allocated to content of course.
<u>3.0</u>	Daily assignments.

\* The rating is a weighted average for all five fall terms.

One interesting result is that at the end of the semester students rated frequency of quizzes the highest of the choices given, while after four weeks of class this item was not mentioned as often as a way to improve learning (see Table 1). Review lists for exams and other class handouts are considered effective. In class exercises, such as small group discussions and practice quizzes are also popular. Somewhat deflating is the rating given instructor's explanations. Time allocation ratings may reflect the interest in more class-wide discussion. Content of course ratings could contain a wish for more "teaching to the test". Daily assignments are not graded but are used for discussion in class and apparently are not very effective for promoting learning.

It is important to recognize that successful efforts to improve learning come under many labels. Instructors of a Principles course have used an array of methods to enhance learning without any reference to a specific philosophy. A major mistake is to become doctrinaire about methodology. For this instructor the continuous improvement philosophy did serve as a change agent and provided a point of departure for trying to improve. Purposeful experimentation grounded in knowledge, regardless of its label, can provide the vehicle for improving the learning process.

Continuous improvement is forever. Thus, the reference to successes and failures is not the finished effort that these terms connote. No universal formula for improving learning has emerged from the author's experience of the past few years. Finally, don't over-emphasize methods at the expense of content.

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