Chaffey College Institutional Research

Research Brief

Economics Department
Fall 2015 Student Learning Outcomes (SLOs) Assessment
Economics 1 (Introduction to Economics)

Learning Outcome Statement: In the Fall 2015 semester the Economics Department engaged in an in-depth exploration of the following course-level student learning outcome in Economics 1 (Introduction to Economics):

- Students will examine the marginal benefits and marginal opportunity costs of economic decision made by individuals, households, businesses, and/or governments.

This course-level learning outcome supports the following Economics Department program-level outcome:

- Students will apply marginal benefit marginal opportunity cost analysis to economic decisions made by individuals, households, businesses, and/or governments.

Means of Assessment and Criteria: In support of the identified student learning outcome, Economics Department faculty developed the following means of assessment and criteria:

- An assessment instrument will be administered to students enrolled in Introduction to Economics (ECON-1) sections taught by full-time and part-time faculty. Assessment will occur approximately one week before final exams (approx. September 30th for Fast Track 1 sections and November 25th for all other sections). At the end of ECON-1, 60% of assessed students will generate a score of 60% or higher on the assessment instrument.

In the Fall 2015 semester, Economics Department faculty identified five questions that demonstrated acquisition of the stated student learning outcome. With the support of the Office of Institutional Research, the Economics Department distributed a scannable assessment form that identified student responses to the five assessment items.

Consistent with the stated means of assessment, assessment forms were disseminated in one Fast Track 1 ECON-1 section by September 30th and in five full-term and one Fast Track 2 ECON-1 sections by November 25th, reaching a total potential audience of 183 students. In total, 110 valid assessment forms were returned (a 60.1% response rate), affording researchers the ability to generalize findings with a 90% confidence level (confidence interval ± 5.9).

Summary of Evidence: Table 1 provides a frequencies distribution of the number of items answered correctly out of a total of five items. The mean number of items answered correctly by students was 3.40, the median 3.0, and the mode 4.00. In examining the range of correct responses, 22.7% of students were able to identify all (100%) of the

questions correctly; 49.1% were able to identify four or more of the questions correctly (80.0%); and 74.6% were able to correctly identify three or more questions (60.0%).

Table 1

Number of Questions Answered Correctly By Respondents	Post Assessment		
	Number	Percent	Cum. %
All Five Questions Answered Correctly (100.0%)	25	22.7	22.7
Four Questions Answered Correctly (80.0%)	29	26.4	49.1
Three Questions Answered Correctly (60.0%)	28	25.5	74.6
Two Questions Answered Correctly (40.0%)	22	20.0	94.6
One Question Answered Correctly (20.0%)	5	4.5	99.1
No Questions Answered Correctly (0.0%)	1	0.9	100.0
Mean Number of Items Answered Correctly	3.40		

As Table 1 indicates, **evidence collected in ECON-1 sections in the Fall 2015 semester indicates that students exceeded the thresholds established for the stated course-level learning outcome (i.e., 74.6% of assessed students were able to correctly answer at least 60% of assessment instrument items).**

Additional analyses were conducted for each assessment item. For each of the five assessment questions that demonstrated acquisition of the stated student learning outcomes, Table 2 identifies the number and percentage of students who identified the correct response.

Table 2

#	Assessment Question	Correct Responses	
		N	%
1	Which of the following could be analyze using benefit cost analysis? (correct response: all of the following)	70	63.6
2	You own a pizza restaurant in Claremont that delivers in Claremont only. If you wanted to decide whether to increase the delivery radius to Upland, which of the following would be useful in your benefit cost analysis of this decision? (correct response: the number of other pizza restaurants (if any) that already provide delivery service to Upland)	91	82.7
3	Which of the following could be analyzed using benefit cost analysis to decide how many years to stay in college? (correct response: all of the following)	60	54.5
4	A rational decision maker using benefit analysis will take those actions for which the expected marginal benefit is: (correct response: greater than the expected marginal cost)	65	59.1
5	Juan, the manager of Fresh Fruit and Veggie Smoothies, is considering increasing his house of operation by staying open 3 more hours each day. Juan estimates the additional costs will be $120 per day. He estimates he will generate an additional $240 in revenue each day. What decision should Juan make if he is using benefit cost analysis? (correct response: Juan should stay open 3 more hours each day)	88	80.0

Of interest to Economics Department faculty was the distribution of incorrect responses to each assessment question. Tables 3 through 7 provide the individual responses to each assessment question (correct responses are highlighted in yellow).

Table 3

Q1	Which of the following could be analyzed using benefit cost analysis?	Responses	
		N	%
a	all of the following	70	63.6
b	Should we increase taxes on households earning more than $250,000 per year?	18	16.4
c	Should I retire at age 55 or keep working?	10	9.1
d	Should you start your own business or work for someone else's business?	12	10.9

Table 4

Q2	You own a pizza restaurant in Claremont that delivers in Claremont only. If you wanted to decide whether to increase the delivery radius to Upland, which of the following would be useful in your benefit cost analysis of this decision?	Responses	
		N	%
a	all of the following	13	11.8
b	the amount you spent 6 months ago repairing your refrigerator unit	4	3.6
c	the amount you paid an attorney last month for winning a course case involving an employee you fired for theft who claimed wrongful termination and sued you	2	1.8
d	the number of other pizza restaurants (if any) that already provide delivery service to Upland	91	82.7

Table 5

Q3	Which of the following could be analyzed using benefit cost analysis to decide how many years to stay in college?	Responses	
		N	%
a	all of the following	60	54.5
b	should I get a B.A. or an A.A. degree?	24	21.8
c	how much will it cost to change majors and is it worth it?	9	8.2
d	should I take a promotion at work if it means I have to work more hours, take fewer classes, and finish my degree two years later than I planned?	17	15.5

Table 6

Q4	A rational decision maker using benefit analysis will take those actions for which the expected marginal benefit is:	Responses	
		N	%
a	greater than the expected marginal cost	65	59.6
b	Increases the demand for substitutes for fast-food meals	15	13.8
c	at its maximum possible level	19	17.4
d	known with 100% certainty	10	9.2

Table 7

Q5	Juan, the manager of Fresh Fruit and Veggie Smoothies, is considering increasing his hours of operation by staying open 3 more hours each day. Juan estimates the additional costs will be $120 per day. He estimates he will generate an additional $240 in revenue each day. What decision should Juan make if he is using benefit cost analysis?	Responses	
		N	%
a	Juan should stay open 3 more hours each day	88	80.7
b	Juan should keep his hours the same	15	13.8
c	Juan should go out of business since he is losing money	2	1.8
d	Juan should add sandwiches and salads to his menu	4	3.7

Use of Results for Planning:

As Table 2 indicates, three of the five assessment items were correctly identified by greater than 60% of Economics 1 students. ***As such, attention may need to be placed on concepts related to or wording of Questions 3 and 4, which only 54.5% and 59.1% of respondents answered correctly, respectively, in order to assess how well students are learning these concepts. In regard to the other three questions, Economics Department faculty may want to consider: a) whether question response options sufficiently challenge students to reflect acquisition of the learning outcome; and/or b) examining other course-level learning outcomes if future assessments suggest that the currently identified learning outcome criteria has been met.***

Continuous Improvement:

Economics Department faculty initiated formal assessment of program- and course-level learning outcomes in the Fall 2010 semester. After discussing learning outcomes findings at their August 2011 department meeting, Economics Department faculty developed new program- and course-level learning outcomes to assess starting in the Fall 2011 semester. Assessment of these learning outcomes continued through the Spring 2013 semester. Economic Department faculty re-examined learning outcomes and associated means of assessment at their Fall 2013 departmental flex meeting and developed new learning outcomes and assessment questions, which ran through two cycles prior to assessment items being updated for Fall 2014. After two examinations of the findings related to these revised questions, the Economics Department elected to examine a different student learning outcome for ECON-1 beginning in the Fall 2015 semester. The current research brief reports the first examination of findings related to this newly examined SLO. The Economics Department learning outcomes assessment process meets the sustainable continuous quality improvement criteria established by the Accrediting Commission for Community and Junior Colleges (ACCJC), namely:

- Student learning outcomes and assessment are ongoing, systematic and used for continuous quality improvement.
- Dialogue about student learning is ongoing, pervasive and robust.
- Evaluation of student learning outcomes processes occurs.
- Student learning improvement is a visible priority in all practices and structures.
- Learning outcomes are specifically linked to program review.