
ECONOMIC LITERACY: BASELINE DATA FOR STANDARDS BASED INSTRUCTION AND CURRICULUM

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ABSTRACT

Today's students, the next generation of consumer decision-makers, display misunderstandings and ignorance about our economic system. Two-thirds of high school students failed a nationally normed test of economic understanding, including the core concepts of money, inflation, and scarcity (Harris, 1999). These findings raise serious questions about the quality of the economic education students receive.

This repeated-measures study was designed to support the development, and improve the delivery, of economic education programs. The Basic Economics Test (BET), a nationally normed and standardized test published by the National Council on Economic Education, was administered to 5th graders in Southeastern Idaho. Over 1000 students from 54 classrooms were tested and contributed to the collection of baseline data. Analysis of these data supports the philosophy of integrating economic concepts early in the educational process and across all curricula.

Children make economic decisions continually. Economics is everyday life! The vision is "children growing to become productive workers, responsible citizens, knowledgeable consumers, prudent savers and investors, effective global participants and lifelong decision-makers" (Dempsey, Meszaros & Suiter, 1999, 22). Implications of this study include: (1) standards based instruction and curriculum; (2) teacher training; and (3) curriculum enrichment.

INTRODUCTION

The basic economic concepts needed for reasoned decision-making are essentially nonexistent in the vocabulary of young people in our society. Today's students, the next generation of consumer decision-makers, display misunderstandings and ignorance about our economic system. On a nationally normed test of economic understanding, the average score among high school students was 48% --- failing! Yet, half (53%) of all high school students are 'very or somewhat interested' in economics. And, two in five students do not receive economics as a part of their education (Harris, 1999). These findings raise serious questions about the quality of the economic education students receive.

Understanding what is meant by economics and economic education is important in considering why economic education must be included in the curriculum. A standard textbook definition of economics is 'the study of the allocation of scarce resources to alternative and competing ends.' Others, emphasizing that the concepts and propositions from economics are widely applicable, simply define economics as the 'science of making decisions' (Walstad & Soper, 1991, 36).

An understanding of basic economic concepts and their *interrelationships* is more important than factual knowledge. This involves an appreciation of how the concepts relate. Ultimately, the goal of economic education is more responsible and effective citizenship through helping students acquire the ability to use economics as independent decision makers confronting problems, personal and social, rather than merely helping them gain knowledge of the facts, concepts and assumptions that comprise part of the discipline (Miller, 1991, 37).

If the purposes of economic education are to be achieved, children must be helped to organize their understanding of the choices they make; understanding toward competence in *applying* that knowledge as decision-makers (Saunders, Bach, Calderwood & Hansen, 1993). "Young children learn early that they cannot have everything they want. Unfortunately, they do not always understand why this is the case or why each choice involves a cost" (Meszaros & Suiter, 1998, 41).

Fundamentally, economics is a way of thinking. "Due to unlimited human needs and wants, and the universal inability to satisfy those needs and wants with limited resources, all people are forced to make choices. Economic decision-making, then, is a necessary skill for individuals to develop in every society" (Jenkins & Nelson, 2001, 1). "The inclusion of economics as a core subject in the goals 2000 Educate America Act recognizes the value of economic understanding in helping people comprehend the modern world, make decisions that shape their futures, and strengthen major institutions" (NCEE, 1998).

Therefore, the purpose of this study was to collect baseline data concerning the current status of economic understanding among young children in Southeast Idaho. The data were collected and analyzed to measure the natural maturation of students' understanding of economics, as integrated into the curriculum by the teacher.

Ultimately, these data can then be utilized for: (1) developing economic education programs that incorporate standards based instruction and curriculum; (2) providing data-driven teacher training; and (3) ultimately, to enrich the curricula with economic concepts, vocabulary, and real-life applications.

LITERATURE REVIEW

Economics is the science of choice. Children make economic decisions continually. Economics is everyday life! It is a unique way of thinking, placing emphasis on human behavior, values, beliefs, and the decision-making process (Morton, 1997). Students in intermediate grades are at an age during which economics is becoming a more obvious and important part of their lives. Consumer expenditures by students at these grade levels are already large and growing; they are making choices each time they enter the marketplace.

The National Council on Economic Education's Campaign for Economic Literacy continues to:

Envision a nation of people who have the knowledge, understanding and skills to make informed economic choices; students who possess economic ways of thinking and problem-solving that they can use in their lives as responsible consumers, producers, savers and investors, and effective participants in a global economy; employees who understand economic concepts and economic ways of thinking and are better able to make informed decisions in their personal finance, in the workplace and as citizens.
(NCEE, 1999 [on-line])

Economics is a required course for high school graduation in only thirteen states. Not requiring economic education or postponing it until the eleventh or twelfth grade may: (1) miss students who have dropped out, and (2) deny the few who take economics in high school many prior years of pertinent and meaningful economic related content, and experience. In order to stop this trend, "We need to know something about what economics students [junior high and elementary grade] levels know, what they can learn, and what they are taught" (Walstad & Soper, 1991, 117).

According to the National Council on Economic Education *Guide to Economic Standards*, "the Standards in economics offer help to raise the quality of economic education in America's schools so that children can fully and effectively participate in the complex global economy they will inherit" (NCEE, 1998). Furthermore, "Nations that establish national standards do so to insure equality of education as well as higher achievement, because they make explicit what they expect children to learn to insure that all children have access to the same educational opportunities" (Ravich, 1998, 1).

Standards fulfill a promise; a promise that students will be able to function in a society with a comprehensive, integrated set of decision-making concepts. Individuals making choices drive an economy, and ultimately, a society. The intent of instruction and curriculum based on national standards is that these choices will more likely be reasonable and sound (NCEE, 1998).

METHODOLOGY

The Idaho State University Center for Economic Education administered the Basic Economics Test (BET), as a pre- and post-test, to 5th grade students in school districts of Administrative Regions 5 and 6. The BET is one of five nationally normed and standardized tests of economic literacy published by the National Council on Economic Education (Walstad & Robson, 1990). It is designed to measure the economic understanding of intermediate elementary students. The economic content of the BET is based upon the second edition of the *Framework for Teaching the Basic Concepts* (Saunders, et al., 1984) of the *Master Curriculum Guide in Economics*.

Permission to conduct this research study was granted by the Human Subjects Committee at Idaho State University, and by school superintendents and parents within each participating district. Eighteen of 33 school districts in Southeast Idaho agreed to participate. Over 1000 students in 54 classrooms (pre-test n =1328; post-test n =1192) were tested and contributed to the collection of baseline data. The instructions from the standardized test were read orally, and the average duration of each student's participation was 30 minutes. Participation was voluntary and refusal to participate involved no penalty or loss of benefits. There were no apparent risks to involvement in the study, and individual names were kept anonymous. Results of the BET testing were recorded in such a manner as to support anonymity.

RESULTS AND DATA ANALYSIS

The BET is a 29-item, multiple-choice test. Students selected their choice from four possible answers for each question. Data from the BET, pre- and post-test, were grouped and summarized by test question. To date, only five out of twenty-nine test questions have been analyzed. The valid percent of students who answered each test question correctly was reported for both the pre-test and the post-test. The percent improvement was also calculated and recorded.

Question #1 - "What does scarcity mean?" had the highest percent improvement (valid percent = 48%) between the pre- and post-test of the five

test questions analyzed. Question #4 had the lowest percent improvement (valid percent = 4.9%) between the pre- and post-test. All five items analyzed showed improvement between the pre- and post-test. The data were summarized and grouped as illustrated in Table 1.

Table 1 Basic Economics Test for 5th Graders			
Fundamental Economic Concepts Questions	Pre-Test Valid %	Post-Test Valid %	% Improvement
#1 Scarcity means?	9.0	57.0	48.0
#2 Why do people make economic choices	24.0	37.0	13.0
#3 What is opportunity cost?	26.3	32.8	6.5
#4 In a market economy, which group has the most influence on what is produced?	19.1	24.0	4.9
#5 A bank pays you for saving your money. What is this payment called?	13.1	42.8	29.7
Pre-test (n = 1328)			
Post-test (n = 1192)			

IMPLICATIONS AND RECOMMENDATIONS

Although this was only an initial test to collect baseline data concerning the economic literacy of young children in southeast Idaho, three major implications have resulted: (1) standards based instruction and curriculum must be presented as early as possible in the elementary grades; (2) teachers must be trained in the economic concepts and the standards in order to present said curriculum to their students; and (3) economics can enrich teaching and learning via integration across all curricula and in all grade levels.

The benefits of this research study are clear: (1) the Center for Economic Education has obtained essential feedback that will lead to improved economic education programming for school districts within Regions 5 and 6 (the university service area); (2) the results of the research

will be made available to researchers, educators, The Idaho Council on Economic Education, and the National Council on Economic Education; (3) the College of Education at Idaho State University will receive the results to provide NCATE (National Council for Accreditation of Teacher Education) with an updated perspective of service and collaborative efforts with schools; and (4) research data collected during the project will be utilized for additional purposes such as teacher training and workshop presentations.

In summary, these data generated conclusions that continue to support the need for standards based instruction and curriculum in economic education. Ninety-six percent of Americans believe economics should be taught in the schools (Brenner, 1999). The time is now to work toward that goal -- with K-12, standards based programs! The research question that must now be addressed is "can the economic literacy levels be enhanced even further through 'implementation of teacher training on, and classroom integration of, standards based instruction and curriculum BETWEEN the pre- and post-test.'" These are the initial steps in the plan to evaluate, develop and ultimately, improve economic literacy in Southeast Idaho.

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