

PROGRAM EVALUATION AND DELIVERY IN ECONOMICS EDUCATION

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ABSTRACT

The purpose of this descriptive study was to determine (1) preferred types of teacher training; and (2) classroom instructional methods utilized in economic education programs within Idaho's K-12 schools, as a baseline for program evaluation and delivery. The individual teacher who is well-trained, and uses instructional strategies involving students, can ultimately have a positive effect on the economic literacy of students in our nations' schools.

Teaching economic educational introduces students to a highly useful way of thinking about basic issues in an economic world. An understanding and applications of fundamental economic concepts and principles can help students in the decision-making process. The goal of economic education is to develop in students the thinking skills and economic knowledge necessary to become effective, participating citizens.

It is widely recognized that the teacher is the key to what is taught in the classroom. Without well-trained teachers, the best written curriculum may not be taught in the classroom. Instructional methods which concentrate on the achievement of a fundamental understanding of economic concepts, and their application in daily life, will assist students in achieving economic literacy. Therefore, enhanced teacher training and interactive methods of instruction are essential to effective economic education across the curriculum.

INTRODUCTION

The economic illiteracy of students is a major concern in our society. According to data from a nationally normed test of economic understanding:

- , only 34% of high school students could identify profits as revenues minus costs;

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- , only 45% realized that government deficits result when spending exceeds revenues; and
 - , only 17% knew who was hurt most by inflation (Brenneke, 1992).

Society is at risk when today's high school students, the next generation of consumers, workers and citizens, display these kinds of misunderstandings and ignorance about our economic system. These results immediately raise questions not only about the economic literacy of our nations' students, but about the quality of the economic education they receive. Ultimately, these concerns activate more economic instruction at both elementary and secondary levels; integrating economics across the K-12 curriculum, integrating economics into subjects like consumer education, general business and U.S. History, and using separate economic courses.

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. It empowers students to understand their world, make reasoned decisions, and act appropriately on personal and social issues of significance (miller, 1991, 37).

Fundamentally, economics is a way of thinking. At the most basic level, the economic way of thinking is best characterized by the saying, "there is no such thing as a free lunch". 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. If economic literacy is the goal, economic education is the process, the delivery system through which economic literacy is achieved, and the students in today's K-12 classroom are the target audience for attaining this goal. Therefore, the purpose of this study was to collect data on current economic education programs, as a baseline for evaluating and delivering economic education in the future.

BACKGROUND

“Requiring formal instruction in economics in our schools by teachers well prepared in the discipline would be a major step to correct...problems” (Hermanowicz, 1991, 77) with economic illiteracy. A change in the primary way we prepare teachers is needed. Economic concepts should be infused throughout undergraduate teacher preparation programs. In addition, it is imperative that “practicing teachers...be given assistance with economic concepts, knowledge, instructional procedures, and materials as part of their in-service education” (Hermanowicz, 1991, 78). In a study of Missouri’s teachers, over 60% indicated a desire to receive in-service training on how to teach economics (Hallows & Solomon, 1991). The individual teacher who is well-trained will more likely take an active role in providing economic education across the curriculum.

In conjunction with enhanced teacher training in economic education, instructional methods which concentrate on the achievement of a fundamental understanding of economic concepts and their applications in daily life, should be developed. Traditional methods of instruction include lectures, written resources and classroom discussion. Teachers should consider the integration of technology, games and simulations, business and community resources and audio-visuals as alternative teaching methods. Ultimately, the success of any economic education program “lies with a firm understanding of when and how to use specific education methodologies” (Sisco, 1991, 301).

Schug (1985) recognized that:

“...to be effective, economic education in the K-12 curriculum demands hard work from professionals in many fields. Administrators and university educators must continue to support and press for the increased training of teachers, the production of innovative instructional projects, and the building of a comprehensive economic curriculum. More attention also should be devoted to finding incentives that will lead teachers to seek more education, and to developing instructional materials that are easier for classroom use. Teachers must master basic economic concepts and give more emphasis to classroom instruction in economics. Researchers must collect more reliable data on the status of economic education on a regular basis” (18).

Minimal research has been conducted within the state of Idaho in regard to the status of economic education in the K-12 classroom. However, a “one-semester course in consumer education is required for graduation. The course requires an

understanding of theories and principles of economics that make the free enterprise system work in our society. Consumer education is required in grades K-12 ("Highsmith, 1989, 5). Therefore, the purpose of this study was to determine (1) preferred types of teacher training; and (2) classroom instructional methods utilized in economic education programs, with Idaho's K-12 schools, as a baseline for program evaluation and delivery. The individual teacher who is well-trained, and uses instructional strategies which directly involve students, can ultimately improve economic literacy.

METHOD

Population

Information was obtained through a descriptive study of K-12 teachers in southeast Idaho. This population was selected for the following reasons: 1) the literature indicated that there has been minimal research completed regarding the instruction of economic education among K-12 teachers; and 2) the literature supported the integration of economic education throughout the K-12 curriculum. A survey questionnaire was utilized to collect data concerning teacher training and methods of instruction in economic education.

Sampling Techniques

Permission to collect data was obtained from 16 of the 33 school district superintendents included in the service area of the Center for Economic Education in southeast Idaho. There were approximately 1400 teachers in this population.

Procedure

The structure of the instrument included three sections: demographics, types of teacher training and classroom instructional methods. Demographics were comprised of open-ended questions regarding teaching background and experience. The other two sections each included a list of concepts developed as a result of the review of literature. Respondents were asked to rate types of teacher training and classroom instructional methods on a Likert scale from 1 "not useful" to 5 "very useful". The survey was field tested and reviewed by a panel of consultants.

Each of the participating teachers received a letter notifying them of the upcoming mailed questionnaire. Approximately one week later, the questionnaire was mailed. The teachers' names were not required on the questionnaire, therefore, assuring them of anonymity and confidentiality. Due to the possibility of low responses, a reminder postcard was mailed 10 days after the initial mailing.

There were 374 teachers who completed the questionnaire; of these, 368 were useable data. Response rate was 27%. The researcher completed computer tabulation of the instrument responses. Data analysis was performed using SPSS 6.1 Guide to Data Analysis (Norusis, 1995).

RESULTS

Demographics

Grade level data were grouped and summarized as illustrated in Table 1. Interestingly, however, seventeen percent (63) of the teachers in this study taught grade 9; 13.9% (51) kindergarten and first grade; 12% (44) grade 7; 10.3% (38) grade 6; 9% (33) grade 8; 8.7% (32) grade 3; 7.1% (26) grade 2; 6.5% (24) grade 5; 4.65% (17) grade 10 and grade 4; 3% (11) grade 12; and 2.2% (8) grade 11. Four teachers (1.1%) did not report a grade level.

Table 1: Grouped Grade Levels (n=368)		
Responses	Frequency	Valid Percent
K-4	126	34.3
5-8	139	37.8
9-12	99	26.9
No Response	4	1.1
Total	368	100.0

Teachers were also asked to indicate the “total number of years taught”. The 368 respondents taught an average of 12 years.

Table 2 illustrated the frequency and valid percent by subject area(s) of the survey respondents. All subjects (elementary) were 38.6% (142) of the 368 responses. Those teaching Language Arts (Reading, Writing, English) were 17.4% (64), while 9.8% (36) taught Mathematics. Teachers in Vocational Education classes (i.e. Business, Home Economics, Computer Drafting, Cabinet making, etc) were 8.7% (32) with Social Studies (including U.S. History, Geography, Government) at 8.2% (30). “Science” teachers were 6.8% (25) and “Physical

Education" teachers were 4.6% (17). "Other" (including Fine Arts such as Music and Art) were 4.3% (16) and 1.1% (4) of the respondents gave "No Response".

Table 2: Subject Area(s) (n=368)		
Responses	Frequency	Valid Percent
All Subject Areas	142	38.6
Language Arts	64	17.4
Mathematics	36	9.8
Vocational Education	32	8.7
Social Studies	30	8.2
Science	25	6.8
Physical Education	17	4.6
Other	16	4.3
No Response	6	1.6
Total	368	100.0

Teacher Training

College/graduate credit courses and in-service seminars/workshops on "how to teach" economics were rated as the "most useful" (mean scores between 3.7 and 3.8) types of training for the integration of economics into the K-12 curriculum. Mailed correspondence courses on "how to teach" or "the subject of" economics were rated as the "least useful" with mean scores between 2.75 and 2.85. Table 3 summarizes these data in detail.

**Table 3: What Training Will Assist Teachers
in Integrating Economics into the K-12 Curriculum
(n=368)**

Training	Total Points	Mean	Rank
College/graduate credit courses on “how to teach” economics	1398	3.80	1
In-service seminars/workshops on “how to teach” economics	1374	3.73	2
College/graduate credit courses on the subject of economics	1343	3.65	3
More clearly defined guidelines and state requirements on the subject of economics	1316	3.58	4
In-service seminars/workshops on the subject of economics	1397	3.52	5
Summer courses on “how to teach” economics	1278	3.47	6
More clearly defined guidelines and state requirements on “how to teach” economics	1251	3.40	7
Summer courses on the subject of economics	1207	3.28	8
Mailed correspondence course on “how to teach” economics	1033	2.81	9
Mailed correspondence course on the subject of economics	1028	2.79	10

The data in Table 4 are presented in ranked order as responses to the research question, “What instructional methods are utilized by K-12 teachers to teach economic concepts?” Games/simulation techniques and guest speakers were rated as “most useful” in teaching economics with the mean scores between 4.0 and 4.5. Workbooks, self-paced materials, textbooks, and written resources (articles, pamphlets, curriculum guides) were rated “least useful” with mean scores between 3.0 and 3.25.

Table 4: What Instructional Methods are Utilized by K-12 Teachers to Teach Economic Concepts (n=368)			
Instructional Methods	Total Points	Mean	Rank
Games/simulation techniques	1484	4.03	1
Guest speakers	1477	4.01	2
Audio-visual resources	1437	3.90	3
Computer-assisted instruction	1415	3.85	4
Business/community-related resources	1414	3.84	5
Educational television	1396	3.79	6
Written resources	1193	3.24	7
Textbooks	1177	3.20	8
Self-paced materials	1158	3.15	9
Workbooks	1134	3.08	10

DISCUSSION

Teacher Training

It was evident that teachers prefer college/graduate credit courses and in-service seminars/workshops on “how to teach” economics. Teachers are also interested in college/graduate credit courses on “the subject of” economics. Mailed correspondence courses are considered the least useful for teachers. These data provide insights into the preferred methods of teacher training by survey respondents and will assist the ISU Center for Economic Education in the design and delivery of future economic education programs.

Instructional Methods

The following is a listing of instructional methods in ranked order from “most to least useful”: games/simulations, guest speakers, audio-visual aids, computer-assisted instruction, business or community-related resources, educational television, written resources, textbooks, self-paced materials, and workbooks. These data provide insights into preferred instructional methods of respondents and will

assist the ISU Center for Economics Education with not only: (1) understanding the current perceptions of their target audience; but (2) modification of existing curriculum; and (3) selection and development of new curriculum.

RECOMMENDATIONS

Although this was only an initial study to ascertain the current status of two basic components of K-12 economic education programs in southeast Idaho, two major goals have resulted: (1) an attempt must be made to provide increased opportunities for economic education in-service, pre-service and credit coursework; and (2) a continuing effort must take place to design and develop classroom instructional techniques which actively engage the student and therefore, increase the possibility of comprehension and application in daily life. It is interesting to note that survey respondents were somewhat evenly distributed across grade levels and subject areas. This may indicate the presence of a core group of interested educators across the curriculum.

Replication of this Study

Further data collection utilizing the survey questionnaire throughout the remainder of the state should be completed. This research could offer beneficial insights on the status of economic education statewide. The survey could also be replicated in other states and ultimately, as a method of describing the status of economic education nationwide.

Related Research

To provide further insights, it is suggested that an investigation among school administrators within the state of Idaho be conducted. The principal, superintendent, or curriculum director would respond to the questionnaire from an administrative viewpoint. These data would provide insights into the perceptions of those in leadership positions including their support for economic education.

Other audiences which could be surveyed in order to provide insights into the whole question of economic literacy, and quality economic education, would be representatives from business and industry, government, and even students themselves. Actual survey questions could be modified as necessary.

In summary, these data generated conclusions which can ultimately lead to a teacher's increased understanding and delivery of improved economic education. Utilization of these data may initiate the development of solutions, skills, and encouragement for teachers toward integration of economics into the K-12 curriculum. Further analysis of this study, as well as future research, will provide

additional answers, as well as further questions, concerning economic education. Bottomline...this survey has begun to generate baseline data (preferred teacher training methods and classroom instructional methods utilized) by K-12 teachers. This is the initial step in the plan to evaluate, deliver and ultimately, improve economic literacy in Idaho.

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