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Evaluating the Effectiveness of EconomicsAmerica's Approach in Teaching Consumer Economics as Compared With the Traditional Approach

Phase I, Teacher's Survey

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September, 1996

Evaluating the Effectiveness of EconomicsAmerica's Approach in Teaching Consumer Economics as Compared With the Traditional Approach:

A Quasi-Experimental Design

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Introduction and Purpose

The purpose of this evaluation is to compare the level of effectiveness of the teaching approach conducted by EconomicsAmerica to the traditional approach for teaching economics. This evaluation is targeted for high school students and will focus on the topic of “consumer economics”. This evaluation is performed on three major areas (1. content, 2. learning, and, 3. impact) and in two separate phases (I. teachers' survey and II. students' evaluation and survey).

In Phase I of the evaluation, twenty-eight teachers who received training in consumer economics from EconomicsAmerica were interviewed by telephone. The structured interview included questions in: (1) training, (2) course content and materials, and (3) teachers' background information. Teachers were asked to make a comparative judgment on the training they have received. To make this judgment, they were asked to compare their teaching practices and students' outcome in the traditional economics classes they have taught with their experience teaching the consumer economics approach they learned from EconomicsAmerica.

In the Phase II of the study, students will be evaluated on three major areas (1. content, 2. learning, and, 3. impact). The evaluation for students will focus on what they have learned and their attitudes toward economics subjects in general and consumer economics in particular. We will discuss the students' evaluation results after the second phase of this study is complete.

Literature Review

There are many different studies reported in the literature discussing different aspects of consumer economics. The literature on teaching of consumer economics will be discussed first and then selected studies on consumer economics in general will be reported.

The Oklahoma State Department of Vocational and Technical Education published a 307 page book on "Development of financial skills, life skills, and teacher education". This book is created to be used in a six-unit course in developing financial skills to help students become more self-sufficient in their personal and professional lives. The course covers the following topics: (a) earning, managing, and spending money; (b) protecting consumers; (c) using financial services; (d) and securing credit. (p. 9). The Home Economics Curriculum Center of Texas Tech University published a book entitled "Consumer and family economics". This book was prepared for use in home economics education in Texas. The following seven areas are covered in this book: (a) family economics, (b) consumers in the economy, (c) role of government, (d) consumer purchasing and assertiveness, (e) obtaining income, (f) protecting family economics security, and (g) consumer careers (p.12).

Peltz et al.(1994), in a journal article on "Teaching world economics: An interdisciplinary approach for the middle level classroom" indicated that studying the world economic system helps middle-school students understand complexities in world economics. They indicated that by examining the interrelationship of economics and everyday life, students can see themselves in the economic chain (p. 13).

The Texas State Commissions on Fire Protection developed a booklet titled: Fire safety for consumers. Economics (high school). Fire safety for Texans: Fire and burn prevention curriculum guide." This booklet, which included the high school economics component of a series of curriculum guides on fire and burn prevention, was designed to meet the age-specific needs of eleventh and twelfth grade students. Among the objectives of this booklet were: (1) developing an awareness of adult responsibilities to preserve family, property, and economy; (2) preparing for maintaining one's own home; and (3) examining U.S. history of fires and burn incidents (p. 18).

The Maryland State Department of Education prepared a guide for teachers titled "Maryland School Performance Assessment Program." In this booklet, they indicated that economics students need to show an understanding of the historical development and current status of economic principles, institutions, and processes needed to be effective citizens, consumers, and workers in the U.S. society (p.19).

Educational Testing Service has compiled a bibliography of tests of consumer competency. This document is called "Consumer competency. Annotated bibliography of test. In this bibliography 18 tests have been cited covering all age levels, though many of them are targeted toward secondary education level. The focus of this booklet is on the skills that individuals should have in order to be effective consumers of goods and services (p. 20).

Horosko, M. M. (1992) wrote a 109-page book as a guide for teachers on integrating the solid waste crisis into the classroom. Topics included in this document include the history of waste, the roots of current waste problem in society's changing lifestyle, how waste affects the earth's natural resources, the different methods of waste disposal, concrete solutions and strategies to reduce waste by composting, recycling, and reusing natural resources (p. 21).

The Illinois Consumer Education Association prepared a document consisting of all 10 issues of the Journal of Consumer Education during the 10 year period from 1983 to 1992. The articles discuss teaching different concepts of consumer economics. For example, the document discusses issues such as "What should we teach about shopping by mail", "family adaptation to economic change", "differences in teenage consumer actions related to employment, sex, and consumer courses", and "perspective on the teaching of consumer education" (p. 22).

Mauldin (1993) collected and edited a series of a series of invited lectures, papers and workshops on consumer economics. The document included 5 invited lectures, 34 refereed papers, 19 refereed poster abstracts, 10 special topics/invited papers, 15 workshops/panel discussions, 6 graduate student papers, and 5 roundtables. The document discuss titles such as biotechnology and the consumer, impact of information on consumers' concerns about

technological innovations, consumer expenditure pattern differentials between working-wife and non-working wife families, self selection and wage gaps between genders and races and many other topics (Pp. 25-26).

The Office of Occupational Education of the South Carolina State Department of Education prepared a consumer education guide. This document provides job-relevant tasks, performance objectives, performance guides, resources, teaching activities, and instructional resources for teaching consumer economics. This document can be used by teachers with any teaching method. This document has two parts, i.e., consumer education I and II. Consumer Education I offers four units: demonstrate understanding of consumer's role in the economic system, make financial decisions, and manage family income, and behave responsibly in the marketplace. Consumer Education II has eight units: show comprehension of resource management in financing a home, manage the transportation dollar, apply the management process in purchasing health insurance, identify types of income insurance plans available to wage earners, apply management process in planning savings and investments, demonstrate understanding of how a will contributes to family security, demonstrate understanding of factors involved in funeral planning, and evaluate job opportunities in the consumer affairs area (P. 26).

The Office of Consumers Affairs prepared a handbook of consumer information. This handbook is called "Consumer's resource handbook" and has 105 pages. The handbook has two sections. In part I, the handbook discusses how to be a smart consumer, lists tips on getting the most for your money, how to handle your own complaint, and writing a complaint letter. It provides information on airline travel, selecting child care, credit cards, environment, selecting a financial institution, and so forth. In part II, the handbook lists offices to contact for help with consumer problems or questions and includes the following sections: corporate consumer contacts, car manufacturers, Better Business Bureaus trade association and other resolution programs, state, county and city government consumer protection offices, state agencies on aging, state banking authorities, state insurance regulator, state utility commissions,

state vocational and rehabilitation agencies; state Weights and Measures offices; military commissary and exchange contact; and Federal information centers (p. 27).

Eastern Michigan University prepared summaries of 37 projects that address the credit education and information needs of consumers (p. 28). Walstad, and Gleason (1992) prepared a book titled "Energy and economics" to provide high school students with an introduction to topics of energy and economics. The document is comprised of 20 activities and is intended for use by teachers of social studies, science, economics, or consumer education.

Kerka and Bonner (1992) indicated that a survey of chief state school administrators found unanimous support among respondents for consumer education as a top or middle priority in education revitalization. They illustrated how children at the elementary school level can acquire consumer concepts and develop daily living skills including decision making, problem solving, and critical thinking skills (p. 29).

The Federal/Provincial Consumer Education and Plain Language Task Force in Canada prepared a guide for classroom teachers. The document provides students with systematic instruction in economics living skills. The document gives high school students an orientation to the economic realities and opportunities in society. The guide helps teachers to teach their students to understand the marketplace; manage resources; apply values, responsibilities, and considerations; act responsibly as consumer-citizens; participate in economics/government systems; and recognize entrepreneurship career opportunities.

The short review of the literature presented above provides some information on consumer education. This list is by no means comprehensive. However, it is sufficient to provide a general picture of materials available particularly for middle school and high school students. This short chapter on the consumer economics literature may suggest that materials and approaches provided by EconomicsAmerica are unique in the way that students learn materials which are more applicable to their daily life situations.

Methodology

Definition of the Terms Used in This Evaluation

Treatment

Treatment refers to the training that teachers received in the subject area of consumer economics from the training sessions conducted by EconomicsAmerica.

Population and Sample

The **population** for this study is all the high school teachers who have attended training sessions in the area of Consumer Economics conducted by EconomicsAmerica (for the Phase I of this evaluation) and all their students who are taught these concepts and approaches by the teachers who participated in the training sessions (for the Phase II of this evaluation). The names and telephone numbers of 120 randomly selected teachers who participated in the training program (the **sample**) were obtained from the office of EconomicsAmerica. Teachers from the list were contacted by telephone and were asked to be interviewed regarding the consumer economics topics taught in the EconomicsAmerica training sessions.

Subject of Evaluation

The subject of this evaluation is the Consumer Economics program conducted by EconomicsAmerica. As indicated earlier, this evaluation has two different phases. In Phase I of the evaluation, teachers' reactions and attitudes are obtained. The focus of the second phase of this evaluation will be students' knowledge, interests, and attitudes regarding the subject of consumer economics.

Instrumentation

The instrument for the first phase of the study is a questionnaire for measuring teachers' attitudes and reactions to consumer economics training materials received from EconomicsAmerica. This phase of study did not use a control or comparison group, and involved interviewing only teachers who have participated in the training program. However, by asking teachers to compare the EconomicsAmerica's teaching approaches with the traditional approaches, teachers served as both experimental and comparison groups in this study.

The instrument had three different parts. In the first part, eight questions concerning the training program were presented. In this part, teachers were asked how many hours of training they had received and if the training was sufficient. They were also asked about the organization of the presentations in the training session, the use of time, the content coverage, and the usefulness of the materials in their actual classroom teaching. These questions were in Likert-type form. In this part of the questionnaire, teachers were also asked if the training helped them in their teaching economics, and if they would recommend the training to their colleagues.

In the second part of the questionnaire (i.e., materials section), teachers were asked to compare the training content/effectiveness with the traditional consumer economics approach. There were 15 questions in this part asking teachers to compare the EconomicsAmerica's consumer economics approach with the traditional approach. These 15 questions can be categorized into two categories: (a) questions concerning students' involvement and learning and (b) questions concerning teachers' attitudes and preferences. These questions were all in a 5-point Likert-type scale ranging from "*not as good*" as the traditional materials to "*much better*" than the traditional materials. In four additional questions, teachers were asked to provide information for enhancing consumer economics materials. Descriptive statistics such as means and standard deviations were computed for the Likert-type questions. Correlations between the Likert-type questions were also obtained to see the degree of association between the different items.

The third part of the questionnaire asked teachers about their background. This included 17 questions regarding their teaching background, their opinion, how much of the training materials they have actually used in their classroom, their level of interest before and after the training session, their gender, age, marital status and type of degree they have received. Some of the questions were open-ended and some had multiple categories of response.

Assessing Validity and Reliability of the Instruments.

Content validity of the instruments was assessed by obtaining expert opinion concerning the content coverage of the questions measuring teachers' attitudes about the training program

and its applications to classroom teaching. Reliability of the Likert-type questions was obtained by computing Cronbach alpha and by applying principal components analysis on the inter-item correlation matrix for the Likert-type questions.

Hypotheses

Following are sets of the null and alternative hypotheses for the first phase of this evaluation (in these statements, "Teachers" refer to those who were selected for this evaluation and who used the EconomicsAmerica's approach and the traditional approach):

H:₁₀ Teachers indicate that the organization of presentation of the training materials was of average quality.

H:_{1a} Teachers indicate that the organization of presentation was of high quality.

H:₂₀ Teachers indicate that the amount/use of time for the training materials was average.

H:_{2a} Teachers indicate that the amount/use of time was excellent.

H:₃₀ Teachers indicate that the content coverage of the EconomicsAmerica materials was average.

H:_{3a} Teachers indicate that the content coverage of the EconomicsAmerica materials was of high level.

H:₄₀ Teachers indicate that the usefulness of the EconomicsAmerica materials for their class was average.

H:_{4a} Teachers indicate that the usefulness of the EconomicsAmerica materials for their class was of high level.

H:₅₀ Teachers indicate that the training did not contribute to their ability in teaching economics.

H:_{5a} Teachers indicate that the training contributed a great deal to their ability in teaching economics.

H:₆₀ Teachers indicate that they would not recommend the training to their colleagues.

H:_{6a} Teachers indicate that they would certainly recommend the training to their colleagues.

- H:₇₀ Teachers indicate that students in general benefited equally from the two sets of materials.
- H:_{7a} Teachers indicate that students in general benefited more from the EconomicsAmerica materials.
- H:₈₀ On the questions concerning teachers, teachers indicated that the EconomicsAmerica training materials and the traditional materials performed at about at the same level.
- H:_{8a} On the questions concerning teachers, teachers indicated that the EconomicsAmerica training materials outperformed the traditional materials.
- H:₉₀ On the questions concerning students, teachers indicate that the EconomicsAmerica training materials and traditional materials performed at about at the same level.
- H:_{9a} On the questions concerning students, teachers indicate that the EconomicsAmerica training materials outperformed the traditional materials.
- H:₁₀₀ The number of years of teaching experience (both in general and in economics) did not have major effects on teachers' evaluations of the EconomicsAmerica materials.
- H:_{10a} Teachers with more years of teaching experience enjoyed the training more and benefited more from those sessions.
- H:₁₁₀ Gender of teachers did not have major effects on teachers' evaluations of the EconomicsAmerica materials.
- H:_{11a} Male and female teachers expressed different level of satisfaction to the training.

Procedure

As indicated earlier, this phase of evaluation focused on teachers who participated in the training sessions of EconomicsAmerica, and who had an opportunity to present the materials from the training sessions to their students. A questionnaire was constructed to be used as the basis for individual structured interviews by telephone. Three researchers with experience in interviewing and in survey research were assigned to conduct the structured interviews. The three researchers used different lists of randomly selected teachers. The three researchers

completed a total of 28 interviews (10, 8, and 10 respectively). Since the three sets of interviews were independent of each other, they were analyzed separately and the results were used for cross-validation. These results will be discussed in the results section of this report.

Data Analyses

Responses to the Likert-type questions and open-ended questions were entered into the computer and descriptive and inferential statistics were applied using the data. For the categorical data such as gender, ethnicity, and type of degree, frequency distributions, percentages for each category and graphs were constructed. For the Likert-type scores (i.e., semi-continuous data) mean, standard deviation and range of the scores were obtained. Frequency distributions and graphs were also obtained for this type of data in order to demonstrate clearer representations of the concepts.

To examine the degree of relationship between different items used in this evaluation, product-moment correlations were computed between different questions. A principal components analysis was conducted on the correlation matrix to investigate if there were any overall underlying characteristics of the items. To examine whether teachers' background variables have a significant impact on their evaluation of training materials they received by EconomicsAmerica, analysis of variance statistics were computed using some of the background variables such as gender, ethnicity, and age as independent variables. All these analyses were performed to assist the examination of the hypotheses mentioned earlier.

In general, based upon the summary statistical analyses about to be presented and upon the interviewers' observation/impression of the interviewees, this evaluation clearly indicates a high level of efficiency and success was attained through the training programs conducted by EconomicsAmerica. The three interviewers reported to the project director that the interviewees were very positive, cooperative and were eager to recommend the training programs to their colleagues.

First, the descriptive statistics on the characteristics of the teachers sampled for this evaluation are discussed. Of the 28 teachers interviewed, 19 are female, 82% are white, 80% are married and their median age is 45. On average, they have over 17 years of teaching experience and approximately 8 years experience of teaching economics. Fifty percent of the teachers being interviewed had earned a Bachelor's degree, and 46.4% had obtained a Master's degree.

Data analyses in relation to each of the hypotheses mentioned earlier will now be described.

H₁₀ Teachers indicate that the organization of presentation of the training materials was of average quality.

To examine this hypothesis, question 3a under the *Training* section of the questionnaire was used. On a Likert-type scale, number 1 was assigned to poor *organization of presentation* of the materials in the EconomicsAmerica training sessions and number 5 was assigned to excellent *organization of presentation*. These numbers which provide ratings in a Likert-type scale, were submitted to SPSS software to compute descriptive statistics such as means and standard deviations. Table 1 summarizes the results of descriptive statistics for this question as well as other Likert-type questions for this evaluation. This table describes the mean, standard deviation, minimum and maximum scores, and valid N (i.e., number of interviews with no missing data). Since the ratings range from 1 (poor) to 5 (excellent), a mean of 3.00 would indicate that the teachers who were interviewed believe that the organization of presentation was average. A mean close to 1.00 indicates poor presentation and a mean close to 5.00 would suggest that the teachers believe that the organization of presentation in training session was excellent. Similar interpretations can be made for other Likert-type questions because they all have the same range of ratings.

As indicated in Table 1 regarding the organization of presentation, the mean is 4.39, standard deviation is .79, minimum number assigned is 3 and maximum number is 5. There are no missing data for this item (i.e. all 28 teachers who were interviewed answered this question).

A mean of 4.39 indicates that all three groups of the teachers interviewed by the three independent interviewers believe that the EconomicsAmerica organization of presentation was between above average and excellent. It is interesting to note that the ratings start with 3. Not a single teacher rated the *organization of presentation* as *poor* or even as *below average*. A small standard deviation of .79 indicates consistency in the responses. The mean of 4.39 is much larger than the average value (i.e., 3.0), that is, 1.39 units larger. To test the null hypothesis of no difference between a mean of 4.39 and a mean of 3.00 (the average value), a t-test comparing the mean of 4.39 with 3.00 was computed. The results of this analysis are summarized in Table 2. Table 2 shows the mean for this item, the standard deviation, and valid N. It also shows the t-value and a Type I error (α) associated with the computed t-value. In addition, this table shows similar computations for other Likert-type questions used in this evaluation. A t-value of 9.31, with 27 degrees of freedom and with a Type I error rate of 0.00 was obtained for this question. As these data indicate, a 1.39 difference between the mean for this item and the average value is significant beyond the .01 nominal level. Therefore, there is enough evidence to reject the null hypothesis stating that *organization of presentation was average*. These results are in favor of the alternative hypothesis that: teachers indicate that the organization of presentation was of high quality.

Chart 1

H:₂₀ Teachers indicate that the amount/use of time for the training materials was average.

To examine the null hypothesis of the amount/use of time was average, question 3b under *Training* section of the questionnaire was used. As Table 1 indicates, the mean for this question is 4.43, with a standard deviation of .69, and scores ranging from 3 to 5. All 28 teachers answered this question. The mean of 4.43 for this item is well above the average of 3.0. This indicates teachers who were interviewed for this study believe strongly that the amount and use of time was very appropriate and efficient. A t-test was used to compare the

mean of 4.43 with the average of 3.00. Table 2 reports the results of this analysis. As Table 2 indicates, a t-value of 10.96 is significant well beyond the .01 nominal level. These results provide enough evidence to reject the null hypothesis in favor of the alternative hypothesis that, teachers indicate that the amount/use of time was at the excellent level.

Chart 2

H:₃₀ Teachers indicate that the content coverage of the EconomicsAmerica materials was average.

Question 3c (Training section) was used to examine teachers' opinion about the content coverage of the training session. The mean for this item was 4.14, with a standard deviation of .89. Scores for this item ranged from 2 to 5. A mean of 4.14 places the content coverage of the training session at the upper half of the distribution suggesting that the teachers believe that the training session had excellent content coverage. The mean is 1.14 units above the average of 3.00. This difference was tested for statistical significance using a t-test. Table 2 presents the results for this analysis. As Table 2 shows, the t-test for this question is 6.78 with 27 degrees of freedom which is significant beyond .01 nominal level. This would support rejecting the null hypothesis stating that content coverage was average and indicates that teachers believe that the content coverage of the EconomicsAmerica materials was at the high level.

Chart 3

H:₄₀ Teachers indicate that the usefulness of the EconomicsAmerica materials for their class was average.

Question 3d (Training section) was used to test this hypothesis. As Table 1 indicates, the mean for this question is 4.29 and the standard deviation is 1.01. Scores for this question range from 2 to 5. The mean of 4.29, which is close to the perfect score of 5, indicates that teachers who participated in the training session believe that the training they received from

EconomicsAmerica has been very useful for their classes. The teachers rated the usefulness of the training materials at 1.29 above the average value of 3.00. This difference of 1.29 was tested for statistical significance. As Table 2 indicates, a t-value of 6.76 with 27 degrees of freedom is significant beyond the .01 level. These results support the alternative hypothesis that teachers believe the EconomicsAmerica materials were very useful for their classes.

Chart 4

H:₅₀ Teachers indicate that the training did not contribute to their ability in teaching economics.

To examine this research hypothesis, question 4 (Training section) was used. The response options for this question is either “Yes” or “No”. A “Yes” response to this question means that the training did contribute to teachers’ ability in teaching economics. Frequencies of “1” for “Yes” and “0” for “No” response were obtained. Table 1 presents these frequencies and also a mean (i.e., proportion of “Yes” answers) for this question. As Table 1 indicate almost all teachers (26 of the total 28 or 93% of the teachers interviewed) indicated that the training program actually contributed to their ability in teaching economics. These results strongly support the alternative hypothesis that teachers believe **that the training contributed a great deal to their ability in teaching economics.**

Chart 5

H:₆₀ Teachers indicate that they would not recommend the training to their colleagues.

One of the best objective criteria in judging the success of a program is to ask if the participants would recommend the program to their colleagues. In this evaluation, when the teachers were asked this question, twenty-eight of the 28 teachers (100%) indicated that they

would definitely recommend this program to their colleagues. These results provide the strongest support for the alternative hypothesis which indicate that teachers indicate they certainly would recommend the training to their colleagues.

For testing hypotheses 7 through 11, Likert-type questions 1a through 1o from the second part of the questionnaire (II. Materials) were used. To answer questions regarding the overall teachers' judgments/attitudes, a composite score of all 15 questions in this section was computed and was used in descriptive and inferential analyses. For questions concerning teachers' factors, questions 1a, 1c, 1d, 1e, 1j, and 1l were averaged to obtain the teachers' composite scores. For questions concerning students' factor, questions 1b, 1f, 1g, 1h, 1i, 1k, 1m, 1n, and 1o were averaged and students' composite scores were obtained.

In this part of the questionnaire, teachers were asked to compare specific aspects of traditional economics textbooks with the EconomicsAmerica's consumer economics material. They were given a rating scale from "1" (traditional material is superior to the materials they received in the training session) to "5" (the training material is superior to the traditional consumer economic materials). The two approaches (traditional and EconomicsAmerica) were compare from different aspects. We now discuss the results in connection with the following hypotheses for this section.

H:70 Teachers indicate that students in general benefited equally from the two sets of materials.

This hypothesis examines the overall effectiveness of the EconomicsAmerica materials compared to the traditional materials. For this hypothesis, we obtained an average rating for all 15 questions in this section. Table 1 presents the mean, standard deviation, range and valid N for this overall rating. As Table 1 indicates the mean for this overall average is 4.00 and the standard deviation is .62. The scores for this variable range from 2.72 to 5.00. A mean of 4.00 is 1.00 unit higher the midpoint of 3.00 indicating that on all 15 questions comparing the training sessions with the traditional materials, teachers believe that the training materials by EconomicsAmerica outperformed the traditional materials. To test the significance of the

difference between the mean of 4.00 for this variable and the midpoint of 3.00 (i.e., similar level of performance) a t-test was computed. Table 2 presents the results of this analysis. Based on Table 2, a t-value of 8.38 with 26 degrees of freedom is significant beyond the .01 nominal level. These findings indicate the alternative hypothesis that the training materials outperformed traditional materials is supported.

H:₈₀ On the questions concerning teachers, teachers indicated that the EconomicsAmerica training materials and the traditional materials performed at about the same level.

To compare the performance of EconomicsAmerica's material with the traditional materials on questions concerning teachers, an average score of questions 1a, 1c, 1d, 1e, 1j, and 1l were obtained. Table 1 presents the mean, standard deviation, range and valid N for this average score. As Table 1 indicates, the mean for this teacher portion of questionnaire is 3.89 and the standard deviation is .69. The scores range from a minimum of 2.33 to a maximum of 5. None of the teachers interviewed believed that the traditional materials are superior to EconomicsAmerica materials. The mean of 3.89 is nearly 1 point (.89) larger than the midpoint 3 (i.e., similar level of performance). This high mean score suggests superiority of the performance of the EconomicsAmerica materials. To determine if the difference (.89) is statistically significant, a t-test was applied to this difference. Table 2 presents the summary of this analysis. As Table 2 indicates, the obtained t-value of 6.70 with 26 degrees of freedom was significant beyond the .01 level. These results support the alternative hypothesis that on the questions concerning teachers, teachers indicate that the training materials outperformed the traditional materials.

H:₉₀ On the questions concerning students, teachers indicate that the EconomicsAmerica training materials and traditional materials performed at about at the same level.

To compare the performance of the EconomicsAmerica's materials with the traditional materials on the questions related to students, questions 1b, 1f, 1g, 1h, 1i, 1k, 1m, 1n, and 1o were averaged and an average score was obtained. Table 1 shows the mean, standard deviation and range for this score. As Table 1 indicates, the mean for this variable is 4.10 and the standard deviation is .60. The scores range from 3.0 to 5.0 which indicate that none of the teachers in this evaluation believed that the traditional materials were better than the EconomicsAmerica's materials. A mean of 4.10 indicates that most of the teachers in this interview believe that the EconomicsAmerica's material were superior to the traditional materials. Table 2 shows the results of the t-test for examining the significance of the 1.1 difference between the mean of 4.10 for this variable and the midpoint of 3.00. As Table 2 indicates, a t-value of 9.52 with 26 degrees of freedom is significant beyond .01 level of significance. These results clearly suggest that on the questions concerning students, the training materials outperformed the traditional materials.

Analyses by Teachers' Background Variables

As indicated earlier, in addition to collecting information on teachers' attitudes and impression of the EconomicsAmerica's training program, data were collected on teachers' personal and teaching background. These data (variables) were used as independent variables in order to examine if they have any impact on the teachers' attitudes/opinions concerning the training they received. In the analyses of these independent variables, the scores (ratings) of the Likert-type questions were used as the dependent variables in a series of analysis of variance and t-tests. In analysis of variance designs, we used age (i.e., question 2 under personal background with 5 categories) and ethnicity (i.e., question 3 with 6 categories). Because of an insufficient number of cases of some of the categories of age and ethnicity, some of the categories were combined. For ethnicity, all 6 categories were combined into two (white, non-white) and for age, 5 categories were collapsed into 3 categories (i.e., 20 to 39, 40 to 49, and 50 and above). Twenty nine different ANOVA designs were created and analyses were

performed on these designs. The results of these analyses are summarized in Appendix A of this report. Significant results were obtained in 2 of the 29 ANOVAs. When number of years of teaching experience was used as a dependent variable in a two-factor ANOVA (age by ethnicity), F-ratios for the main effects for age and ethnicity as well as the F-ratio for the interaction were significant at the .05 level (see Appendix A). Also, when number of years of teaching economics was used as dependent variables in a similar designs, the main effects for age and ethnicity were significant at the .05 level but there was no significant interaction in this case.

There results of the analyses of variance for the other cases show no significant results. That is, there were no age and ethnicity effects on teachers' attitudes or opinions concerning the training materials. This lack of significant impact of age and interaction make the interpretation of the results for this study simple and straightforward. Regardless of their age and ethnicity, teachers were in favor of the training they received and they thought that the training had a great impact on their career as teachers of economics.

The impact of teachers' gender on their responses to this survey was also examined. Unfortunately, because of the small number of teachers interviewed, gender could not be used as another factor in the analysis of variance designs. Thus, gender was used as a single independent variable in separate analyses. Gender was used as an independent variable in a series of t-tests. All the Likert-type questions and other continuous variables such as number of years of experience were used as dependent variables. Appendix B presents the results of the t-tests. Again, in very few cases were significant gender differences found. Out of 30 t-tests, only two were significant. On question 3C, "How was the content coverage?", a t-value of 2.54 with $p = .02$ was obtained. For males, the mean was 3.5 and for females the mean was 4.37. These analyses suggest that females rated the content coverage of training higher than male teachers. Also, on question B1 "How many economics courses did you teach?", male taught an average of 5.2 courses and female taught an average of 2.84 courses. A t-value of 2.86

significant at the .01 level indicated that male teachers taught significantly more economics courses than did female teachers.

The results of analyses showed that the gender of teachers did not have much impact on their attitudes/opinions regarding the training. Regardless of their gender, teachers spoke very highly of the training sessions and the impact of the training on their teaching career.

It must be noted at this point however, that using multiple ANOVAs and t-tests would increase the chance of a Type-I error rate and is not advisable. Unfortunately, due to the small number of teachers in the study, this statistical problem was unavoidable. The significant results found in the ANOVA designs and t-tests should therefore be interpreted with caution.

RESULTS/DISCUSSION

A group of 28 teachers were randomly selected from 3 independent lists of middle school teachers who have participated in the EconomicsAmerica consumer economics training program. The 28 teachers were interviewed by three experienced interviewers (about the same number of interview each) using a questionnaire (scheduled interview). The questionnaire contained questions on the training they received, questions comparing the traditional economics textbooks and background questions including teaching experience and personal background questions such as gender, age, and ethnicity. The questions about the quality of training sessions/materials were in Likert-type scale with ratings from 1 to 5. For each question, the average rating was obtained along with the standard deviation and minimum and maximum scores. These statistics were used to evaluate the effectiveness of the EconomicsAmerica training sessions.

The results of the analyses for this study suggested that in general, teachers were very supportive of the program. They mainly indicated that the program was extremely successful in a sense that it provided good teaching experience. Teachers were very consistent in providing positive evaluation for the training programs. The three groups of teachers interviewed by the

three interviewers were used as cross-validation groups. The results of the analyses across the three groups were very consistent pointing to high internal validity of this study.

In the first part of interview, teachers were asked about the training sessions. In this part questions were asked about number of hours or training, organization of presentations, content coverage and usefulness of the training to teachers' teaching practices. Teachers generally rated the training these aspects very highly. The average ratings for this section ranged from a minimum of 4.14 to a maximum of 4.43 for this section, 3.00 being the average quality of the training. In this section, teachers were also asked if the training contributed to their ability in teaching economics. Ninety three of the teachers responded positively to this question and indicated that the training actually helped them in teaching economics. They were also asked if they recommend the training to their colleagues. All teachers replied "Yes" to this questions. These results strongly suggest that the training was very effective and efficient.

In the second part of the interview, teachers were asked to compare the traditional economics textbook/materials with those of EconomicsAmerica. Teachers were asked to make this kind of comparisons in 15 different areas. That is, 15 different comparisons were made by each teachers in this section. The 15 comparisons were then analyzed individually, and they also were grouped as comparisons related to teachers and comparisons related to students. The rating of "1" to these questions indicates that the traditional materials were superior to the training materials and the rating of "5" indicates that the training materials were superior to the traditional materials. A rating of "3" would indicate that the quality of both is about the same level.

Descriptive statistics (i.e., mean, standard deviation and range) were obtained for each of the 15 items separately. As indicated in the results section, the means for all 15 items were significantly larger the midpoint of "3" (i.e., the two approaches were similarly efficient). In most of the cases the mean score for the items were very close to a perfect "5". That is, most of the teachers rated the training as much more efficient than the traditional materials. The

composite of ratings for questions related to students teachers had also high means with the student questions having relatively higher mean than the teachers questions.

The ratings provided by teachers for each of the Likert-type questions were also analyzed in relation to teachers' teaching experience and background variables. In almost all cases, no effect of teachers' background characteristics was found on their ratings. These results suggest that teachers in general are very supportive of the EconomicsAmerica training program regardless of their background variables such as gender, age, and ethnicity.

Teachers were also asked to provide information and suggestions on ways to improve the training materials. Their answers are summarized and are reported in Appendix D, "Responses to Open-Ended Questions." These responses can be used by the program organizers to improve their program and to increase the level of efficiency of these programs even further than those shown in this evaluation study.

The interviewers observed a great deal of optimism in teachers interview. They reported that teachers who were interviewed were willing to cooperate and all had good impression of the program.

In summary, the results of the analyses on the data obtained from the interviews with the teachers and interviewers impression of the teachers in their interaction all indicate that the EconomicsAmerica's training sessions were very successful. Teachers believed that the training helped them to be more effective economics teachers to teach their students concepts useful to their daily life and they would like to see more of these opportunities in the future.

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An Evaluation of the Consumer Economics Program A Summary of the Analyses

Table 1. Descriptive Statistics for the 28 teachers by the three different interviewers

Questions	Mean	S.D.	Min	Max	Valid N
Organization of presentations	4.39	.79	3	5	28
Amount/use of time	4.43	.69	3	5	28
Content coverage	4.14	.89	2	5	28
Usefulness for my classes	4.29	1.01	2	5	28
Would you say the training contributed to your ability in teaching economics?	0.93	0.26	0	1	28
Would you recommend the training to your colleagues?	1.00	0.00	1	1	28
Coverage/ number of consumer economics topics	3.58	1.33	1	5	26
Practicality/application to life problems	4.56	0.70	3	5	27
Instructor's ease of use	4.44	0.75	3	5	27
Display/attractiveness of materials	3.70	0.95	2	5	27
Interesting for instructors to use	4.22	0.75	3	5	27
Attention level of students	4.15	0.77	3	5	27
Suitability to age and ability of students	4.11	0.97	1	5	27
Suitability of language used	4.33	0.73	3	5	27
Maintaining students' interest	4.11	0.70	3	5	27
Overall appropriateness for consumer training	4.56	0.65	3	5	25
Encourages students' creative response	3.96	0.85	2	5	27
Encourages class attendance	3.56	0.82	3	5	25
Increases students' interest in the topic	3.77	0.76	3	5	26
Encourages students' participation in class discussion	4.15	0.77	2	5	27
Encourages students to volunteer for class activities	3.94	0.78	3	5	27
Question related to teachers	3.89	0.69	2.33	5	27
Questions related to students	4.10	0.60	3	5	27
All questions	4.00	0.62	2.72	5	27

Frequency Distribution

Variable	Value	Frequency	Percentage
Was the training sufficient?	Yes	28	100%
Training contribute to teaching ability	No	2	7.1%
	Yes	26	92.9%
Would you recommend the training to your colleague	Yes	28	100%

Table 2. Summary statistics of t-test comparing the mean of the Likert-type questions with the average of 3.0

Questions	Mean	S.D.	Valid N	<i>t</i>	<i>P</i>
Organization of presentations	4.39	.79	28	9.31	0.00
Amount/use of time	4.43	.69	28	10.96	0.00
Content coverage	4.14	.89	28	6.78	0.00
Usefulness for my classes	4.29	1.01	28	6.76	0.00
Coverage/ number of consumer economics topics	3.58	1.33	26	2.22	0.04
Practicality/application to life problems	4.56	0.70	27	11.58	0.00
Instructor's ease of use	4.44	0.75	27	9.98	0.00
Display/attractiveness of materials	3.70	0.95	27	3.83	0.00
Interesting for instructors to use	4.22	0.75	27	8.45	0.00
Attention level of students	4.15	0.77	27	7.76	0.00
Suitability to age and ability of students	4.11	0.97	27	5.94	0.00
Suitability of language used	4.33	0.73	27	9.46	0.00
Maintaining students' interest	4.11	0.70	27	8.23	0.00
Overall appropriateness for consumer training	4.56	0.65	25	12.00	0.00
Encourages students' creative response	3.96	0.85	27	5.86	0.00
Encourages class attendance	3.56	0.82	25	3.41	0.00
Increases students' interest in the topic	3.77	0.76	26	5.17	0.00
Encourages students' participation in class discussion	4.15	0.77	27	7.76	0.00
Encourages students to volunteer for class activities	3.94	0.78	27	6.26	0.00
Question related to teachers	3.89	0.69	27	6.70	0.00
Questions related to students	4.10	0.60	27	9.52	0.00
All questions	4.00	0.62	27	8.38	0.00

Appendix A. Results of Analyses of Variance by Age and Ethnicity

Table A1.

Analysis of Variance Summary Table for Q3a, "Organization of Presentation"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.11	1	0.11	0.16	0.69
Age	1.35	2	0.67	1.03	0.37
Interaction (Age by Ethnicity)	0.68	2	0.64	0.52	0.60
Residual	14.39	22	0.65		
Total	16.68	27	0.62		

Table A2.

Analysis of Variance Summary Table for Q3b, "Amount/Use of Time"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.63	1	0.63	1.26	0.27
Age	0.61	2	0.31	0.62	0.55
Interaction (Age by Ethnicity)	0.45	2	0.22	0.45	0.64
Residual	10.96	22	0.50		
Total	12.86	27	0.48		

Table A3.

Analysis of Variance Summary Table for Q3c, “

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.31	1	0.31	0.43	0.52
Age	4.28	2	2.14	2.96	0.07
Interaction (Age by Ethnicity)	1.10	2	0.55	0.76	0.48
Residual	15.91	22	0.72		
Total	21.43	27	0.79		

Table A4.

Analysis of Variance Summary Table for Q3d, “

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.00	1	0.00	0.00	0.98
Age	3.76	2	1.88	1.75	0.20
Interaction (Age by Ethnicity)	0.25	2	0.13	0.12	0.89
Residual	23.62	22	1.07		
Total	27.71	27	1.03		

Table A5.

Analysis of Variance Summary Table for QM1a, "Compared to Traditional Textbook"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	4.18	1	4.18	2.22	0.15
Age	1.22	2	0.61	0.33	0.73
Interaction (Age by Ethnicity)	1.44	2	0.72	0.38	0.69
Residual	37.65	20	1.88		
Total	44.35	25	1.77		

Table A6.

Analysis of Variance Summary Table for QM1b, "Practicability/Application to Life"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.75	1	0.75	1.35	0.26
Age	0.31	2	0.16	0.28	0.76
Interaction (Age by Ethnicity)	0.06	2	0.03	0.06	0.95
Residual	11.13	20	0.56		
Total	12.35	25	0.49		

Table A7.

Analysis of Variance Summary Table for QM1c, "Instructor's Ease of Use"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	1.04	1	1.04	2.07	0.17
Age	2.66	2	1.33	2.66	0.09
Interaction (Age by Ethnicity)	0.40	2	0.20	0.40	0.67
Residual	10.03	20	0.50		
Total	14.46	25	0.58		

Table A8.

Analysis of Variance Summary Table for QM1d, "Attractiveness of Materials"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	3.43	1	3.43	3.90	0.06
Age	1.89	2	0.94	1.07	0.36
Interaction (Age by Ethnicity)	0.28	2	0.14	0.16	0.86
Residual	18.49	21	0.88		
Total	23.63	26	0.91		

Table A9.

Analysis of Variance Summary Table for QM1e, "Interesting for Instructor to Use"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.30	1	0.30	0.50	0.49
Age	1.60	2	0.80	1.36	0.28
Interaction (Age by Ethnicity)	0.30	2	0.15	0.26	0.78
Residual	12.40	21	0.60		
Total	14.67	26	0.57		

Table A10.

Analysis of Variance Summary Table for QM1f, "Attention Level"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.03	1	0.03	0.04	0.85
Age	0.34	2	0.17	0.24	0.80
Interaction (Age by Ethnicity)	0.17	2	0.09	0.12	0.89
Residual	14.85	21	0.71		
Total	15.41	26	0.59		

Table A11.

Analysis of Variance Summary Table for QM1g, "Suitability to Age and Ability of Student"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.70	1	0.70	0.66	0.43
Age	1.19	2	0.60	0.56	0.58
Interaction (Age by Ethnicity)	0.53	2	0.26	0.25	0.78
Residual	22.24	21	1.06		
Total	24.67	26	0.95		

Table A12.

Analysis of Variance Summary Table for QM1h, "Suitability of Language Used"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.48	1	0.48	0.95	0.34
Age	0.95	2	0.48	0.93	0.41
Interaction (Age by Ethnicity)	0.26	2	0.13	0.26	0.61
Residual	10.22	20	0.51		
Total	11.76	25	0.49		

Table A13.

Analysis of Variance Summary Table for QM1i, "Maintaining Students' Interest"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.91	1	0.95	2.13	0.16
Age	0.01	2	0.00	0.01	0.97
Interaction (Age by Ethnicity)	0.73	2	0.37	0.82	0.41
Residual	8.88	20	0.44		
Total	10.64	25	0.44		

Table A14.

Analysis of Variance Summary Table for QM1j, "Overall Appropriateness of Consumer "

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.70	1	0.70	1.61	0.22
Age	0.78	2	0.39	0.90	0.42
Interaction (Age by Ethnicity)	0.07	2	0.04	0.08	0.87
Residual	8.65	20	0.43		
Total	10.60	25	0.42		

Table A15.

Analysis of Variance Summary Table for QM1k, "Encourages Student Creative Response"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.65	1	0.65	0.84	0.37
Age	1.44	2	0.72	0.92	0.42
Interaction (Age by Ethnicity)	0.27	2	0.14	0.17	0.84
Residual	14.78	19	0.78		
Total	16.96	24	0.71		

Table A16.

Analysis of Variance Summary Table for QM1l, "Encourages Class Attendance"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	3.94	1	3.94	6.67	0.02
Age	0.12	2	0.06	0.10	0.90
Interaction (Age by Ethnicity)	0.64	2	0.32	0.54	0.60
Residual	11.22	19	0.60		
Total	16.16	24	0.67		

Table A17.

Analysis of Variance Summary Table for QM1m, "Increases Students' Interest in the Topic"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.99	1	0.99	1.58	0.22
Age	0.82	2	0.41	0.65	0.53
Interaction (Age by Ethnicity)	0.35	2	0.18	0.30	0.76
Residual	11.86	19	0.62		
Total	14.00	24	0.58		

Table A18.

Analysis of Variance Summary Table for QM1n, "Encourages Students' Participation in Class"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.06	1	0.06	0.10	0.76
Age	1.80	2	0.90	1.44	0.26
Interaction (Age by Ethnicity)	0.28	2	0.14	0.22	0.80
Residual	11.86	19	0.62		
Total	14.00	24	0.58		

Table A19.

Analysis of Variance Summary Table for QM1o, "Encourages Students to Volunteer for Class

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<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.47	1	0.47	0.69	0.42
Age	0.39	2	0.19	0.29	0.75
Interaction (Age by Ethnicity)	0.48	2	0.24	0.36	0.70
Residual	12.75	19	0.67		
Total	14.00	24	0.58		

Table A20.

Analysis of Variance Summary Table for TEACHER, "Questions Related to Teachers"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.70	1	0.70	1.34	0.26
Age	0.34	2	0.12	0.23	0.80
Interaction (Age by Ethnicity)	0.32	2	0.16	0.31	0.74
Residual	10.91	21	0.52		
Total	12.22	26	0.47		

Table A21.

Analysis of Variance Summary Table for STUDENTS, "Questions Related to Students"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.27	1	0.27	0.64	0.43
Age	0.17	2	0.09	0.20	0.82
Interaction (Age by Ethnicity)	0.01	2	0.00	0.02	0.97
Residual	8.86	21	0.42		
Total	9.36	26	0.36		

Table A22.

Analysis of Variance Summary Table for ALL, "All Questions"

<i>Source of Variations</i>	<i>S. S.</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Main Effects					
Ethnicity	0.46	1	0.46	1.04	0.32
Age	0.20	2	0.01	0.22	0.80
Interaction (Age by Ethnicity)	0.10	2	0.05	0.12	0.89
Residual	9.23	21	0.44		
Total	10.04	26	0.39		

Appendix B. Summary of the Results of t-tests: for independent samples of GENDER

Table B1, Q1, Number of training hours received by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	3.88	0.64	-1.06	.298
Female	19	4.79	2.37		

Table B2, Q3a Organization of presentations by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	4.00	0.76	-1.63	.116
Female	19	4.53	0.77		

Table B3, Q3b: The amount/use of time by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	4.00	0.76	-2.11	.045
Female	19	4.58	0.61		

Table B4, Q3c: How was the content coverage? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	3.50	0.93	-2.54	.018
Female	19	4.37	0.76		

Table B5, Q3D Were the materials useful for your classes? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	4.00	1.07	-0.97	.342
Female	19	4.42	1.02		

Table B6, QM1A How do the materials compare to other texts? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	7	3.88	1.57	-1.01	.323
Female	19	4.79	1.24		

Table B7, QM1B: Practicability by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	4.50	0.76	-0.26	.794

Female	19	4.58	0.69
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Table B8, QM1C Instructors ease of use? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	4.25	0.89	-0.87	.3934
Female	19	4.53	0.69		

Table B9, QM1D Display/attractiveness of materials? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	3.50	1.12	-0.71	.482
Female	19	3.79	0.86		

Table B10, QM1E Interesting for instructor to use? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	4.00	0.76	-1.00	.328
Female	19	4.31	0.75		

Table B11, QM1F Attention level of students? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	3.88	0.84	-1.21	.239
Female	19	4.26	0.73		

Table B12, QM1G Suitability to age and ability of students? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	3.88	1.36	-0.81	.424
Female	19	4.21	0.79		

Table B13, QM1H Suitability of language use? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	4.37	0.74	0.19	.852
Female	19	4.32	0.75		

Table B14, QM1I Maintaining students interest? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	3.88	0.84	-1.15	.262
Female	19	4.21	0.63		

Table B15, QM1J Overall appropriateness for consumer training? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	7	4.43	0.79	-0.62	.540
Female	18	4.61	0.61		

Table B16, QM1K Encourages students creative response? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	3.88	0.84	-0.34	.736
Female	19	4.00	0.88		

Table B17, QM1L Encourages class attendance? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	3.50	0.76	-0.25	.808
Female	17	3.59	0.87		

Table B18, QM1M Increases students interest in the topic? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	3.88	0.84	0.46	.648
Female	18	3.72	0.75		

Table B19, QM1N Encourages students participation in class discussions? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	4.25	0.71	0.44	.298
Female	19	4.11	0.81		

Table B20, QM1O Encourages students to volunteer for class activities? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	3.88	0.84	-0.22	.831
Female	19	3.95	0.78		

Table B21, QB1 How many economics courses did you teach? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	5.25	3.11	2.86	.009
Female	19	2.84	1.34		

Table B22, QB2 What percent of time was spent on consumer economics? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	20.00	15.12	-0.95	.354
Female	18	30.72	30.18		

Table B23, QB6 How much of the consumer economics materials did you use? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	1.63	1.06	-0.96	.347
Female	18	2.06	1.06		

Table B24, QB8 What was your level of interest before training? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	2.50	0.54	0.54	.591
Female	19	2.32	0.89		

Table B25, QB9 What was your level of interest after the training? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	2.63	0.52	-1.67	.107
Female	19	2.89	0.32		

Table B26, NUMTCH Number of years of teaching? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	19.38	13.33	0.79	.436
Female	18	15.78	9.37		

Table B27, NUMTCHEC Number of years teaching economics? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	7.13	3.22	-0.56	.579
Female	18	8.56	6.81		

Table B28, DEGREE Indicate the highest degree you have attained? by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	1.88	0.35	2.83	.009
Female	18	1.33	0.49		

Table B29, TEACHSUB -Teacher subscale. by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	6	28.50	5.47	-0.15	.882
Female	16	28.81	3.87		

Table B30, STUDTSUB -Student subscale by Gender

Groups	N	Mean	SD	<i>t</i>	<i>p</i>
Male	8	31.88	6.01	-0.41	.683
Female	18	32.78	4.72		

Appendix C. - - Correlation Coefficients - -

	NTRAIN	Q3A	Q3B	Q3C	Q3D	
NUMTCH	.0433	.0189	-.1722	.1478	-.0214	
	(27)	(27)	(27)	(27)	(27)	
	P= .830	P= .925	P= .390	P= .462	P= .915	
NUMTCHEC	-.1676	.1451	.1389	.0432	-.1214	
	(27)	(27)	(27)	(27)	(27)	
	P= .403	P= .470	P= .490	P= .830	P= .546	
DEGREE	-.3117	-.1228	-.0323	-.2070	-.2822	
	(27)	(27)	(27)	(27)	(27)	
	P= .113	P= .542	P= .873	P= .300	P= .154	
	QM1A	QM1B	QM1C	QM1D	QM1E	QM1F
NUMTCH	-.1538	-.2747	-.1132	-.2136	-.0854	-.2431
	(25)	(26)	(26)	(26)	(26)	(26)
	P= .463	P= .174	P= .582	P= .295	P= .678	P= .231
NUMTCHEC	-.0268	-.3032	-.1812	-.3006	-.2098	-.1248
	(25)	(26)	(26)	(26)	(26)	(26)
	P= .899	P= .132	P= .376	P= .136	P= .304	P= .544
DEGREE	-.1380	.1111	-.0518	-.0808	.0000	-.1000
	(25)	(26)	(26)	(26)	(26)	(26)
	P= .511	P= .589	P= .802	P= .695	P= 1.000	P= .627
	QM1G	QM1H	QM1I	QM1J	QM1K	QM1L
NUMTCH	.1001	-.2363	-.2838	-.2598	.0298	-.2071
	(26)	(26)	(26)	(25)	(26)	(24)
	P= .627	P= .245	P= .160	P= .210	P= .885	P= .332
NUMTCHEC	.0385	-.1649	-.0711	-.1550	.0087	-.3408
	(26)	(26)	(26)	(25)	(26)	(24)
	P= .852	P= .421	P= .730	P= .460	P= .966	P= .103
DEGREE	-.1185	.2132	.1140	-.1608	.1351	-.1642
	(26)	(26)	(26)	(25)	(26)	(24)
	P= .564	P= .296	P= .579	P= .443	P= .510	P= .443
	QM1M	QM1N	QM1O			
NUMTCH	-.0842	.0359	-.1765			
	(25)	(26)	(26)			

P= .689 P= .862 P= .388

NUMTCHEC -.1668 -.0126 -.2702
(25) (26) (26)
P= .426 P= .951 P= .182

DEGREE .1175 .3000 .0985
(25) (26) (26)
P= .576 P= .136 P= .632

QB1 QB2 QB6 QB8 QB9

NUMTCH .2176 -.3341 -.3477 -.0086 -.2304
(26) (26) (26) (26) (26)
P= .286 P= .095 P= .082 P= .967 P= .258

NUMTCHEC .0957 -.2386 -.2166 -.3152 -.4331
(26) (26) (26) (26) (26)
P= .642 P= .240 P= .288 P= .117 P= .027

DEGREE .0717 -.1665 -.1487 -.0518 -.2132
(26) (26) (26) (26) (26)
P= .728 P= .416 P= .469 P= .802 P= .296

QB9

QB8 .3500
(27)
P= .074

Appendix D. Some Responses to Open-Ended Questions - -

Overwhelmingly, teachers who were interviewed were very enthusiastic about both the training and the materials, and used the materials to the extent that they had time to incorporate the consumer economics materials in their classes. The following section will summarize the comments made by teachers to the open-ended questions regarding the training, the materials, and suggestions for enhancing the consumer economics materials.

First of all, most of the teachers interviewed were very enthusiastic about the training session. Fifteen of the teachers made additional comments about their satisfaction with the training and materials. In particular, teachers were impressed with the training instructor, giving comments such as "good, sincere, exceptionally high impression", "excellent, organized and clear - a nice guy", "calm, fun and real." Teachers found the training helpful and informative, and all teachers stated that they would recommend the training to colleagues. In general, teachers were also enthusiastic about the materials - one teacher commented that she used the materials the following day. One other comment regarding the training was that several teachers were of the impression that the materials were best suited for students in the higher grade levels, and might not be as useful in honors or AP courses where other topics must be emphasized.

One other noteworthy response was that **all** teachers stated that their interest in the topic of consumer economics increased as a result of the training session and using the materials.

Much of the enthusiasm about the topic was based on the practicality of the materials, and the fact that topics were often not presented in such an appealing way in traditional economics textbooks. Teachers commented that the realistic scenarios, such as the predicament of X and Jerome, were

particularly useful and interesting for students. **Many of the teachers** stated that they chose the lessons based on the topic that was current in their curriculum. Only one teacher stated that she used all the EconomicsAmerica lessons, with the others stating that they did not have sufficient class time to cover all the materials.

Though the teachers were pleased with the effectiveness of the materials, when asked what additional topics they would like to see included, suggestions were made by several teachers. Topics that were put forth were income taxes, banking, health and life insurance, job seeking, and car buying. Two of the teachers suggested that more emphasis be put on consumer topics faced by pre-graduation teenagers. Three teachers indicated a preference for more "macro" economics topics, such as monetary policy and foreign currency and its effect on the economy.

Most teachers had no suggestions regarding format changes of the materials, though three teachers suggested the addition of more charts and graphs, both in the materials and for the students to complete in activities.

Regarding the activities, two teachers stated they would like to see more simulations, and three teachers stated they would like more exercises on planning a budget.

One interesting comment was that while most of the teachers agreed that the language level was appropriate, one teacher with a high percentage of ESL students said the language could be simplified. Another teacher commented that a bilingual supplement would be helpful.