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Proceedings of the Academy for Economics and Economic Education

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GEOGRAPHICAL DIFFERENCES IN POVERTY AND QUALITY-OF-LIFE RATINGS

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INTRODUCTION

In a recent report of the activities of Devonport Action Against Poverty (DAP), a British organization, Van der Gaag (1999) notes the overwhelming clamor by the members for respect for people in poverty. They say that poverty "is not about money, though it is what you can do with money." According to Van der Gaag, poverty is about money to the extent that it includes good housing, jobs, healthcare, education, leisure facilities, improved levels of benefit which don't penalize people for working, better transport, and an improved environment. Moreover, there are issues that don't involve money such as, more time, good relationships, privacy, community spirit and respect.

It is normal for workers, corporate executives, public officials to pay attention to ranking of localities across the country based on some traits that measure the quality-of -life. According to Gyourko (1991), a locality's quality of life depends on more than amenities. In an empirical analysis, Gyourko employed a battery of variables to compute the quality-of-life indexes for several localities across the country. These variables include precipitation, cooling degree days, average relative humidity, sunshine, cost-of-living index, hospital beds property tax rate, population and crime rate. Given the broad coverage of this new measure of quality-of-life index, our objective in this paper is to determine the level of consistency between the quality-of-life and poverty level rankings across localities in the U.S. It is important to know if regional disparities in poverty rates reflect differences in economic well-being as measured by quality-of-life ratings.

POVERTY AND QUALITY-OF-LIFE

In 1974, Chenery *et al* directed the attention of international organizations to the devastating effect of poverty and the need to adopt strategies that would eradicate this social ill from the face of the earth. According to Lipton (1995) the reason for researchers' interest in poverty measurement is to find out how serious the epidemic is for different people and to explore the causal link between policy tools and other macroeconomic variables. Stevens (1994) recalls that policymakers generally are interested in the length of time individuals spend below poverty line because of its implications on management of public assistance programs. Triest (1997) notes that poverty rates in the U.S. vary from one region to the other just like the demographic characteristics of the poor. The author wonders why the depth of poverty varies as much as it does across different regions of the country.

Theoretically, the subject matter of poverty is based on the 'basic needs' approach. Fishlow (1995) notes that this approach emphasizes "the importance of separating generalized increases in income from the more significant attainment of the requirements for a permanent reduction of poverty – improvements in health, regular access to nutritional food, more education, and better and affordable shelter." The arguments used to support this thesis include the fact that many people that are classified poor are not direct producers but part of the dependent population. It is not automatic that an increase in income of individuals is spent on essential services such as better medical care, housing and safe drinking water. Finally, individuals vary in their ability to spend disposable income effectively and wisely.

Based on the foregoing, it is not unlikely for income to increase without any appreciable increase in the standard of living. More importantly, Fishlow (1995) notes that the negative correlation between income and poverty does not negate the relevance of public poverty strategies. However, any public policy directed at eliminating poverty should recognize the regional differences in poverty levels. Triest (1997) identifies the factors responsible for the regional differences in poverty rates in the U.S. These include, distribution of potential family earnings, number of weeks the family head was unemployed or whether or not the head of the family is a single woman. Burtless (1996) blames world trade for the inequality in earnings. According to him, even if trade is absolved of blame for trends in unearned income or changes in the composition of households, it is still a source of growing wage inequality.

Powers and Dupuy (1994) note that poverty is an eclectic concept that captures market conditions, demographic characteristics and fiscal policy. The authors posit further that it is difficult to accurately measure poverty because of complications created by interregional differences in cost of living and the quality of life. It is no surprise that Gyourko (1991) and Gyourko and Tracy (1991) developed a more comprehensive measure of a locality's quality of life. The value of a locality's quality-of-life (QOL) is defined by Gyourko (1991) as:

$$QOL_j = \sum_{k=1}^{m} (FP_k * T_{kj}) \quad (1)$$

where,

$$FP_k = LP_k - WP_k \quad (2)$$

QOL_j = Quality-of-life index for the jth locality.
FP_k = Full implicit price for trait k.
LP_k = The market price of land.
WP_k = The labor market price.
T_{kj} = The quantity of trait k in locality j.

In order to compute the index for a locality, Gyourko and Tracy used implicit prices by comparing each locality to a hypothetical locality having the average values of all locality traits. The logic is to obtain an index value in dollars which reflect the premium individuals are willing to pay to live in a given locality relative to the hypothetical benchmark locality.

EMPIRICAL ANALYSIS

As stated earlier, the objective of this paper is to determine the level of consistency between the quality-of-life and poverty level rankings across localities in the U.S. Moreover, it is important to know if geographical disparities in poverty rates are accounted for in the differences in economic well-being as measured by quality-of-life ratings. The data employed in this paper include the quality-of-life ratings for U.S. cities reported by Gyourko and Tracy (1991), 1990 U.S. census data of the number of households in poverty and the respective population numbers for U.S. cities and metropolitan statistical areas (MSA). For each city or MSA, the poverty number is divided by the population number to obtain the proportion of the population that is in poverty.

The Spearman's Rho and Hotelling-Pabst test are employed to analyze the data. These tests are the nonparametric equivalent of a test of correlation for matched pairs of data. Consider the following bivariate random sample of size n, (X_1, Y_1), (X_2, Y_2), ..., (X_n, Y_n). Let R(Xi) be the rank of Xi compared with the other values of X, for i=1,2, ...,n. For example, R(Xi) = 1 if Xi is the smallest number in the series. By the same token, let R(Yi) be the rank of Yi for i=1,2,3,....., n. The Spearman's Rho is defined as,

$$\rho = \frac{\sum_{i=1}^{n} [R(X_i) - \frac{n+1}{2}] [R(Y_i) - \frac{n+1}{2}]}{n(n^2 - 1)/12} \qquad (3)$$

where,

ρ = Spearman's correlation coefficient
R(Xi) = The rank of variable Xi
R(Yi) = The rank of variable Yi
n = Sample size

An equivalent but computationally convenient form is given by:

$$\rho = 1 - \left(\frac{6 \sum_{i=1}^{n} [R(X_i) - R(Y_i)]^2}{n(n^2 - 1)}\right) \qquad (4)$$

As Conover (1980) notes, the Spearman's rho is insensitive to some types of dependence in the data; thus, a researcher is allowed to be specific as to the nature of the dependence that may be detected. Under this test, the null hypothesis is that variables Xi and Yi are mutually independent. The alternative hypothesis is that there is a tendency for the smaller values of X to be paired with the larger values of Y, and vice versa. The null hypothesis is rejected if ρ is less than its selected critical level.

The Hotelling-Pabst test is similar to the Spearman's Rho test. The Hotelling-Pabst T is defined as,

$$T = \sum_{i=1}^{n} [R(X_i) - R(Y_i)]^2 \quad (5)$$

The null hypothesis stated above will be rejected if T exceeds its 1-α quantile. It should be noted that T is large when ρ is small, and vice versa.

The aforementioned tests were applied to the city/MSA poverty and QOL rankings for 113 cities/MSAs selected from Gyourko and Tracy (1991). The null hypothesis tested is that the quality-of-life and poverty index rankings are mutually independent. Consequently, the alternative hypothesis is that there is a tendency for the smaller values of poverty index to be paired with the larger values of QOL index and vice, versa. The calculated Spearman's rho value of 0.022 is compared to the critical value of -0.155 which reflects a 5 percent level of significance. This result indicates that one cannot reject the null hypothesis of independence. By the same token, we obtained a Hotelling-Pabst T value of 235,098 which is compared to a critical value of 277,841.21. Again, this result is indicative of a non-rejection of the null hypothesis at the usual 5 percent level of significance.

CONCLUSION

Many economists and social scientists agree that GNP per capital is a crude and incomplete measure of quality of life but, several public policymakers still rely on this measure (Nussbaum & Sen, 1993). One approach to life is based on a combination of doings and beings which collectively referred to as funtionings. According to Nussbaum & Sen (1993), these funtionings embrace. Such matters as being well nourished and disease-free, self-respect, preserving human dignity and taking part in the life of the community. In a similar pattern of argument, Wingo and Evans (1977)observe that any economic policy directed at improving the quality of life must address health, education, urban economics and the economics of the environment.

The United Nations Development Program defines human poverty as "a denial of choices and opportunities for living a tolerable life." As noted earlier in this paper poverty goes beyond money of lack of it and its impact varies from one place to another. Powers and Dupuy (1994) attribute poverty differences across geographic regions to demographic, economic, policy and cost-of-living factors. A discussion on poverty resembles closely that of quality of life to the extent that one thinks poverty is an a significant indicator of quality of life.

The approach in this paper has been to explore the level of consistency between geographical rankings of quality of life and poverty in the U.S. In order to this, the authors employed the Spearman's rank correlation and Hotelling-Pabst tests. The expectation is that the locality with the highest poverty rate would be rated at the bottom of the rankings based on the quality of life indicator. The results of both tests indicate no dependency between the two rankings. The justification for these results is based on the narrow measure of poverty that is currently being used. It is observed that poverty is defined very broadly, while its measurement is quite very restrictive.

REFERENCES

Burtless, Gary (1996), Worsening American Income Inequality: Is World Trade to Blame? *The Brookings Review*, (Spring) vol 14, #2, 26-31.

Chenery, H.B., Ahluwalia, M.S., Bell, C., Duloy, J.H., & Jolly, R. (1974), ***Redistribution With Growth***, New York: Oxford University Press.

Conover, W.J. (1980), ***Practical Nonparametric Statistics***, New York: John Wiley & Sons.

Fishlow, Albert (1995), Inequality, Poverty, and Growth: Where Do we Stand? *Annual World Bank Conference on Development Economics*, 25-39.

Gyourko, Joseph (1991), How Accurate Are Quality-of-Life Rankings Across Cities? *Business Review*, Federal Reserve Bank of Philadelphia, March/April, 3-14.

Gyourko, Joseph & Tracy, Joseph (1991), The Structure of Local Public Finance and the Quality of Life, *Journal of Political Economy*, (August)

Hotelling, H. & Pabst, M.R. (1936), Rank Correlation and Tests of Significance Involving no Assumption of Normality, *The Annals of Mathematical Statistics*, vol. 7, 29-43.

Lipton, Michael (1995), Comment on "Research on Poverty and Development Twenty Years after Redistribution with Growth," by Pranab Bardhan, *Annual World Bank Conference on Development Economics*, 73-79.

Nussbaum, Martha C. & Sen, Amartya (eds) (1993), ***The Quality of Life***, New York: Oxford University Press.

Powers, Elizabeth T. & Dupuy, Max (1994), Understanding Differences in Regional Poverty Rates, *Economic Commentary*, November 15, 1-6.

Spearman, C. (1904), The Proof and Measurement of Association Between Two Things, *American Journal of Psychology*, vol 15, 72-101.

Stevens, Ann H. (1994), The Dynamics of Poverty Spells: Updating Bane and Ellwood, *American Economic Review*, vol 84, #2, 34-37.

Triest, Robert K. (1997), Regional Differences in Family Poverty, *New England Economic Review*, January/February, 3-17.

Van der Gaag, Nikki (1999), Poverty: Challenging the Myths, *New Internationalist*, March, Issue #310, 7-11.

Wingo, Lowdon & Evans, Alan (1977), ***Public Economics and the Quality of Life***, Baltimore: The Johns Hopkins University Press.

ECONOMISTS DON'T TEACH THE ECONOMICS THAT STUDENTS NEED TO KNOW: RE-WRITING THE HIGH SCHOOL & COLLEGE ECONOMICS CURRICULUM

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ABSTRACT

Approximately 25 percent of the American public ever take a College-level course in economics, while the need for more and better economic education, especially K-12, is undisputed. However, the question of the content of the economics courses remains under vigorous discussion. The publication of both state and national standards on economics has intensified this debate.

Based on 12 years of the experience of conducting teacher training workshops at the Center for Economic Education, and work on the New York State curriculum, I began a College course "Economics and Everyday Life" to integrate non-traditional areas of discourse for students taking a single class in economics during their College career. I am now working on a similar curriculum for high school students.

This paper offers a the outline of this curriculum: based on "real world" economics which prepares students to understand the political/economic dynamics of the world around them, read newspapers, and to live in a ethnically diverse, and globalized economy. This requires moving away from the narrow framework of a traditional macro-micro courses to integrate issues of race, gender, global economics, and issues of personal finance. The project offers curriculum units which provide an understanding of the basic categories of everyday life such as work, consumption, saving, credit. The goal would be to provide pedagogical techniques which complement this broader canvas.

The paper will also address the limitations of the National Standards in Economics.

ASSESSING ECONOMIC UNDERSTANDING IN THE EARLY GRADES

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ABSTRACT

The issue of assessment is becoming increasingly important to a society that is demanding more value for, and return on, their educational dollars. Educational reform measures, passed by state legislatures, typically include assessment and productivity requirements. Federal and private grant agencies are also including outcome assessment requirements as part of their submission criteria for funding requests. In all of these cases, the use of pre and post testing is considered a valuable method for measuring success.

In economic education assessment tools exist for use at a variety of educational levels. These include the Test for Understanding College Economics (for college principles courses), the Test of Economic Literacy (Grades 11 and 12), the Test of Economic Knowledge (Grades 7 to 9), and the Basic Economics Test (Grades 5 and 6). All of these are nationally normed and offer a basic evaluation of economic understanding, relevant to each specific education level. Consequently, each is a valid tool for assessing economic knowledge through pre and post test use.

Below the 5th grade level, however, no specific test exists for measuring economic understanding. Since each of the above mentioned tests have reading comprehension as a prerequisite, a lack of this ability in the lower grades may explain why we do not offer assessment tools for these grade levels.

In an attempt to bridge this gap, the authors of this paper are developing a testing device for use in the early grades that is not dependent on reading comprehension and ability. After reviewing the education literature on early grade assessment, a potential instrument is discussed for use as a pre and post testing device, based on the concepts included in the Voluntary National Standards. Finally, potential uses of this assessment device are posited.

INTRODUCTION

In contemporary society, it is becoming increasingly important for students to have a working understanding of the economic principles guiding the market. More often than not, educational institutions tend to focus economic teachings on secondary school students, who are closer to entering the market as independent consumers and/or producers. However, the foundation for an understanding in economics should begin much earlier than this; specifically the basic principles of economics should be implemented into curriculum for students as young as kindergarten. By introducing economics in these very early grades, students will be able to build on the principles they

learn throughout their school years and more readily identify with these principles in their own experiences outside the classroom. However, educating elementary students in economics is not the norm; rather it is often ignored for many reasons, including a perceived lack of need for economic education, time constraints in the classroom, and inadequacy of teachers in the field.

Why is economic in the early years needed? According to Mark C. Schug, editor of *Economics in the School Curriculum, K-12*, teaching economics is laying the foundation for learning which policies are best, which economic alternative should be accepted, and foreseeing the possible consequences of the resulting action (Schug, 21). Economics plays a direct role in our everyday lives, for we act as both consumers and producers; furthermore, it has great influences on local, state, and federal policy (Voluntary National Content Standards, Introduction). In our economy, where so much depends on the votes of the citizens in regards to economic policy, it is of major importance that voters be educated so they can make intelligent voting decisions (Schug, 32). Therefore, a better understanding of economic principles will benefit our democratic society, for "a democratic market economy" works better when its inhabitants are more knowledgeable in the area of economics (Voluntary National Content Standards in Economics, Introduction). It is an education which should begin in elementary school.

The reasons for economic education beginning as early as kindergarten seem very apparent. The argument for early childhood economic education is summarized in a statement made by William L. Goodwin and Laura A Driscoll in their book *Handbook for Measurement and Evaluation in Early Childhood Education*, where they speak of the early years of childhood as "the foundation for later competence and development" (Goodwin, 3). Why then is this type of education more often than not overlooked when teachers are planning their curriculum? There are two main reasons for neglecting to convey very valuable economic lessons to students.

The first of these concerns time. Teachers often find themselves constrained by time in the classroom, because they think their main responsibility lies in the teaching of those basic traditional subjects that are required, whereas economics is not. For example, according to Schug, elementary teachers generally spend about twenty minutes a day on social studies courses, with only one-fifth of this time devoted to economic principles. This translates into a mere twenty-five minutes a week (Schug, 15). This is simply not enough time to convey economic principles effectively.

Secondly, teachers suffer from an inadequacy when it comes to the area of economics. Data show that about fifty percent of elementary educators have no background in economics, and only twenty-five percent have had just one course in the subject. Therefore, most teachers interviewed in the survey said they experience a severe lack of confidence in their abilities to teach economics well (Schug, 10).

The National Council on Economic Education has taken great strides to change this trend. The Council has developed several elementary school publications which are designed to aid teachers in implementing economics education in the classroom. A master curriculum guide gives educators a "detailed step-by-step lesson plan" to follow with simple participatory activities for the students. A book entitled *Economics for Kids* has also been written as a "practical guide to information pertaining to what, when, and how to teach economics to young children." Included in the guide are possible ideas for utilizing resources found in the community in order to illustrate basic economic concepts. Finally, *Econ and Me* is a video composed of five, fifteen minute segments covering economic principles in terms with which elementary students can readily identify. Each segment

focuses on a particular concept, including scarcity, opportunity cost, consumption, production, and interdependence. In order to help teachers further explain the ideas presented in the video, an instructional guide is included which gives examples of situations that can be used to reinforce the concepts introduced in the video.

Even with these relatively new tools for implementing economic education into elementary classrooms, there exists no direct way to evaluate how effective the tools are in conveying basic economic principles. We are developing a simple test of ten multiple-choice questions covering very basic economic principles which we plan to administer to several kindergarten through third grade classes, in a pre and post test format. We maintain that in doing this, we can begin to understand what children of this age know, what they are capable of learning, and how we can illustrate their understanding with a simple test.

TEST METHODOLOGY

Educational assessment, used to evaluate aptitudes, skills, knowledge, and abilities, is a tool that has been used by educators since the onset of teaching itself. Although there is very little information in regards to the early history of testing, ancient records have been found which suggest that some sort of evaluation of academic achievement was utilized, even though it did not play a significant role. Most of these evaluations were oral in form; it was not until 1845 that the use of oral testing as the dominant measure of academic achievement began to decline. As the population of students in school grew, oral testing became more and more difficult and time-consuming. With the need for some other form of evaluation, Horace Mann, the Secretary of the Massachusetts Board of Education, used his influence to bring the earliest paper and pencil tests to the United States, which were first administered to pupils in Boston, Massachusetts. The ease of giving and benefits resulting from these examinations led Mann and others to develop similar tests for other areas of the curriculum, such as arithmetic, geography, grammar, and history (Ahmann, 10).

The advancements that came from the written testing style of evaluation being utilized at Boston did not readily travel to other parts of the US. For practically the remainder of the nineteenth century, other school systems chose to ignore the existence of paper and pencil tests, opting instead for the familiarity of oral tests. It was not until the early twentieth century that great strides in educational assessment began to take place. It was then that a man later to be regarded as the "father of educational measurement," E.L. Thorndike, published a book containing his views on the state of educational evaluation. In his book he included two tests, the *Stone Reasoning Test in Arithmetic* and the *Thorndike Scale for Handwriting of Children*. There was a tremendous response to his work, as many others followed in his path to produce similar tests and research on the subject of testing. Since then, there has been enormous growth in written testing (Ahmann, 11). In fact World War I saw the first testing of large numbers of people at the same time after the Binet Simon scale of intelligence was originated in France. Lewis Terman introduced this idea to the US when he developed the Stanford-Binet test; this was the first test to be standardized, meaning it gave specific directions for test givers in both the areas of administering the exam and scoring and evaluating the results. As World War I loomed on the horizon, the need for a large population of people to be tested simultaneously became evident, and the Army Alpha test was introduced to satisfy this need.

It consisted of "a group-administered, pencil-and-paper test, which became the prototype of virtually all 'scientific' testing today" (Wigdor, 8, 9).

Since then, the ability test has come to be defined as the "systematic observation of performance on task" (Wigdor, 9) and can be administered in a number of ways, including pencil and paper group tests, oral question and answer tests, and physical activity tests. Three direct participants have been identified in this testing process: the test producer or developer, the person or institution basing decisions on the test, and the test taker. They are a measure of several different areas of ability, including individual achievement, excellence, progress, student difficulties, competence, effectiveness of teaching technique, and specific skills (Wigdor, 10-12).

Since the introduction of the ability test, standardized testing has not just become the norm but the major method of testing in schools. In fact, schools are the number one user of standardized tests in the US. According to the Association of American Publishers, ninety percent of standardized test sales are to schools (Wigdor, 153). However, even with the popularity of such tests, there lies much criticism in their widespread use, particularly in the areas of test construction, test use, and test interpretation. One main argument against standardized testing regards their primary measure of cognitive functions; they do not encompass other important areas of life, such as determination, motivation, interpersonal awareness, social skills, or leadership ability. All of these are vital contributors to good performance, yet they are neglected by standardized testing (Wigdor, 12-15).

Specifically, multiple-choice tests have been the subject of much criticism over the years. However, as Phillip Saunders in his book *The Principles of Economics Course* suggests, the benefits of this type of testing far outweigh the disadvantages. As already discussed, teachers are under a strict time schedule. These time constraints are greatly reduced with the use of multiple choice testing because they are administered with ease and scored fairly quickly. Another criticism lies in the suggestion that multiple choice tests are less effective in measuring a student's achievement, however, Saunders states that there is virtually no evidence to support this argument. Multiple choice tests are able to include more of the covered material, and teachers are able to measure the depth of understanding by putting a series of questions on one topic on the exam, which leads to more reliable indications regarding what the students actually understand. Finally, another benefit implied by Saunders, is that no bias in multiple choice testing exists due to the limited vagueness in questions and answers (Saunders, 192-195).

After reviewing the benefits of multiple choice testing, we believe it is the most efficient manner in which to go about evaluating kindergarten through third grade students in their understanding of basic economic principles.

TEST CONTENT

Each question is designed to relate to one of the Content Standards included in the National Standards. Specifically, the questions address benchmarks to be attained at the completion of Grade 4 (the earliest grade listed). What follows is an example of a test question.

Content Standard 1: Productive resources are limited. Therefore, people can not have all the goods and services they want; as a result, they have to choose some things and give up others.
Grade 4 benchmark: People make choices because they can't have everything they want.

Question stem: Which of the following best shows scarcity?
Answer: Picture of three children and one ice cream cone.

In constructing multiple choice tests, a critical aspect is the validity of the distracters (incorrect responses). We plan on paying particular attention to these. Three distracters for this question might include pictures of a swing set, a cat and a dog together, and a mouse with a piece of cheese. Once trial testing and evaluations are performed, distracters will change, based on measures of validity.

Also included in the benchmarks from Content Standard 1 is the concept of opportunity cost. Here a question asks: "Which of the following would be an opportunity cost of doing your home work?" The correct answer might be something like a kid on a swing set.

The other content standards that provide 4th Grade benchmarks are:

Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Most choices involve doing a little more or a little less of something: few choices are "all or nothing" decisions.

Different methods can be used to allocate different goods and services. People acting individually or collectively through government, must choose which methods to use to allocate different kinds of goods and services.

People respond differently to positive and negative incentives.

Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and usually among individuals or organizations in different nations.

When individuals, regions, and nations specialize in what they produce at the lowest cost and then trade with others, both production and consumption increase.

Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.

Prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives.

Competition among sellers lowers costs and prices, and encourages producers to produce more of what consumers are willing and able to buy. Competition among buyers increases prices and allocates goods and services to those people who are willing and able to pay the most for them.

Institutions evolve in market economies to help individuals and groups accomplish their goals. Banks, labor unions, corporations, legal systems and not for profit organizations are examples of important institutions. A different kind of institution, clearly defined and enforced property rights, is essential to a market economy.

Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services.

Income for most people is determined by the market value of the productive resources they sell. What workers earn, depends primarily on the market value of what they produce and how productive they are.

Entrepreneurs are people who take the risk of organizing productive resources to make goods and services. Profit is an important incentive that leads entrepreneurs to accept the risk of business failure.

Investment in factories, machinery, new technology, and in the health, education, and training of people can raise future standards of living.

There is an economic role for government in a market economy whenever the benefits of a government policy outweigh its costs. Governments often provide for national defense, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also redistribute income.

Unemployment imposes costs on individuals and nations. Unexpected inflation imposes costs on many people and benefits some others because it arbitrarily redistributes purchasing power. Inflation can reduce the rate of growth of national living standards because individuals and organizations use resources to protect themselves against the uncertainty of future prices.

As should be evident, some of these standards are most likely more amiable to teaching children in the third and fourth grades, but our test will try to focus on as many of these standards as possible.

EXTENSIONS

Once developed, implemented on a trial basis, and adjusted in response to validity testing, we believe this test will provide educators with a valid pre and post testing device for assessing learning in the K to 2 classroom setting. This should prove useful to grant administrators seeking outcome measures to gauge project success. Further, it should also send signals to concerned teachers as to their effectiveness in covering particular economic topics.

Another use for this test would be to measure the effectiveness, depth, and breadth of existing curriculum materials that are used in the lower grades. This would give teachers some indication of what materials might be best suited for addressing specific topics or standards.

Finally, use of the pretest will provide information with regards to how much younger students know about economics before they are exposed to the subject in school. Also of interest will be the extent to which this knowledge varies based on age alone. Extensions of this might include examining other socioeconomic factors that might play a role in a young child's level of economic literacy.

CONCLUDING COMMENTS

As is easily surmised, this is a work in progress. Some additional material will be available at the conference presentation, and the authors will look forward to audience input and feedback prior to the final development of the assessment tool. We will also be seeking contacts and volunteers to assist with the implementation and testing of this project.

COMPARATIVE ECONOMIC ISSUES IN SOUTH KOREA AND THE UNITED STATES

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INTRODUCTION

Of all the nations of Southeast Asia, South Korea holds a unique relationship with the United States. Unlike Japan, the dominant economy of the region, South Korea has never been an enemy of the United States and the military partnership that has protected the South Koreans from the communist threat of North Korea has assured a close working relationship politically. However, in recent years the economic relationship of the two countries has become increasingly important to both nations. Although South Korea has a much smaller population than Japan, it is in some ways a more important trade partner as South Korea imports more from the United States than it exports to the United States. On a per capita basis, South Korea's imports from the United States exceed those of Japan by about twenty-five percent. Also, South Korea purchases more from the United States than the much larger Germany.

Since 1997, South Korea has suffered very difficult economic turmoil. Depreciation of the currency; large losses in the industrial sector; and financial instability in the financial sector have combined to create a recession that has greatly affected the economic well-being of one of the most important allies of the United States, both politically and economically. Understanding the basis of the problems and the meaning for the United States will be important issues as the economic and political powers work together to try to return the health of the South Korean economy.

THE SOUTH KOREAN ECONOMIC MIRACLE

At the end of the Korean War, South Korea emerged as the Korean territory below the 38th parallel that was not under the domination of communism. Just a few years after the removal of the dominance of Japan that had abused Korea through the end of WWII, the Korean peninsula had endured a very difficult battle as to whether the communist system would dominate the entire country. The peace settlement divided the country into two separate entities with an uneasy truce maintained by peacekeeping forces along the border. The threat from North Korea has remained viable ever since and has been the basis for the political partnership of the United States and South Korea.

The economic relationship was much slower in developing. South Korea undertook a massive economic development process that has yielded impressive gains over the last thirty years. Over the thirty-year period 1960 – 1990, average GDP growth was 8.6 percent in South Korea compared to 3.1 percent in the United States. At that rate, GDP doubled approximately every eight years in South Korea while it took over twenty-two years for the United States GDP to double. However, the South Koreans were starting from a much lower level, thus have yet to catch up though tremendous progress has been made.

To a great extent, the rapid economic growth of South Korea was fueled by capital accumulation directed by centrally directed government policies. The South Korean government favored large industrial giants called *chaebol* by assuring favorable credit and other important favors that protected certain companies in certain industries. Such centrally directed policies have come back to haunt the country as the rapid capital accumulation reached an inevitable breaking point in the mid-1990s.

THE SOUTH KOREAN ECONOMIC PROBLEM

Beginning in 1997, many countries of Southeast Asia began to experience problems in their economies. The Japanese economy, dominant in the region, had stagnated earlier in the 1990s and eventually those problems and other factors created problems in other Asian countries. Large debt levels that had fueled economic expansion began to cause financial instability as growth slowed from very high levels to slow growth and finally to recession. Eventually the depreciation of the South Korean won caused a loss of confidence and led to capital flight that exacerbated the overall problem. An economy that had gotten used to very high rates of growth fell into recession and now is hoping to post gains of around 2 percent for 1999. Such low growth places additional pressure on a financial services sector that has developed a huge percentage of non-performing loans that will likely never be repaid. Government efforts to reform have largely been cosmetic so far and have been limited by the immense influence of the *chaebol* who have been favored in the past.

One of the major issues that was often overlooked in the boom days of the 1980s was the threat to economic stability if the booming growth rates could not be sustained. The high savings rates, rapidly improving education and movement of rural peasants into the modern economy all contributed to the boom. The resultant increase in real estate and trade deficits created a scenario that could quickly shake the financial services sector unless the high rates of growth continued. However, the objective observer should have known that those conditions could not accelerate forever. Similar to the savings and loan crisis in the United States, the conditions in South Korea favored capital investments due to governmental actions that failed to acknowledge that an economic slowdown would result in severe financial crisis. Unfortunately for South Korea, the crisis in South Korea was widespread rather than confined to a few sectors and a few regions of the country, as was the case in the United States.

REVIEW OF SOUTH KOREAN ECONOMIC GROWTH

The economic problems of recent years in South Korea are based on the relative contribution of the factors that fuel economic growth. While South Korea was growing much faster than the United States for several years prior to 1997, the factors contributing to growth in the two countries was dramatically different. In general, South Korea and many of the other nations of Southeast Asia spent very heavily on capital accumulation during the 1960 to 1990 time period. Such expenditures typically require large sums of investment up front with the expectation that future output will be increased to repay the borrowed monies.

Note the relative contribution of capital, labor and technical progress to economic growth in several countries as shown in Table 1.

Table 1. Factor Contributions to Economic Growth for Selected Countries to 1990.

Country	Rate	Percentage Contribution of Economic Growth Factors		
		Capital	Labor	Technical Progress
South Korea	8.6	67	19	14
Taiwan	8.7	72	13	15
Japan	6.7	49	6	46
United States	3.1	24	28	49
West Germany	3.2	36	-7	71

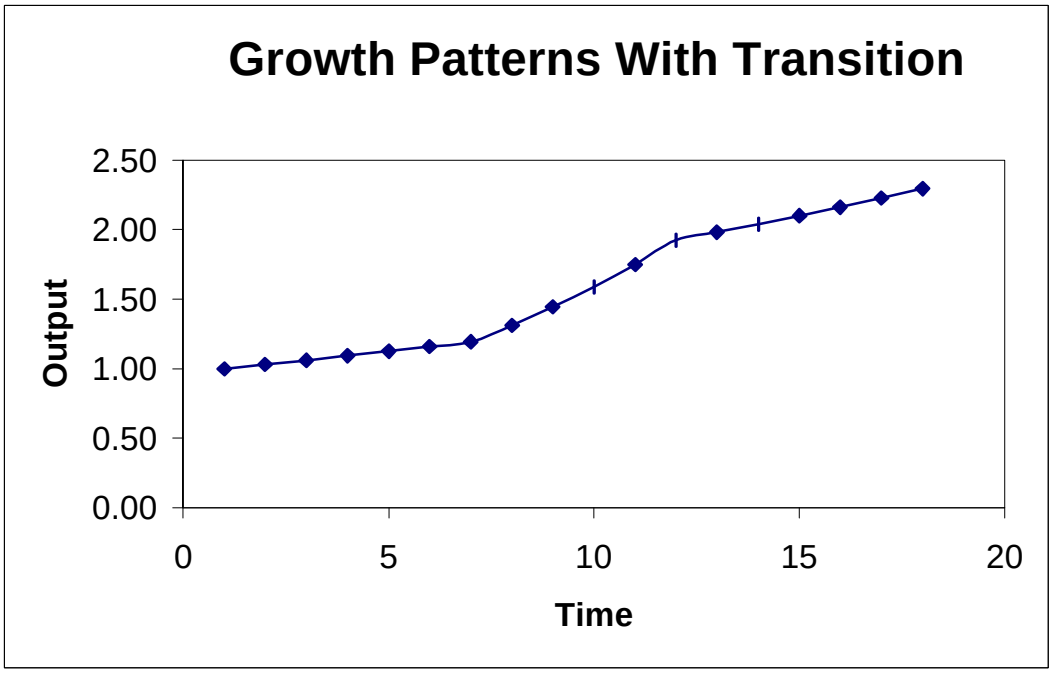
Source: Kim and Lau (1994)

As can be clearly seen, the economy of South Korea was growing much faster than the larger economies of Japan, Germany, and the United States. Taiwan was also a very similar growth economy. However, the contribution of capital to that growth was much greater in South Korea than in Japan, Germany, or the United States. Japan, Germany, and the United States on the other hand, grew more because of technical progress, though at a slower overall rate.

In a simplistic conceptual model, it might be stated that South Korea grew because it had more things with which to produce while Japan, Germany, and the United States grew because they had better things with which to produce. Such a distinction has important implications for the capacity to sustain economic growth. Note also that while Japan had contributions of technical progress similar to the United States, it also had relatively high rates of capital accumulation contribution. The addition of additional capital is subject to diminishing returns while the increased technology influences the capacity of current capital and labor to produce more efficiently.

As shown in Figure 1 below, the rate of sustainable growth in an economy is dependent on the rate of technical progress. Given an economy that is growing at a constant rate through period 7, a temporary increase in growth rate (rate of change in output) can be accomplished by increasing capital investment shown by the steeper slope from period 8 through period 12. However, long-term, the growth rate will again slow as shown starting in period 13 above unless the rate of technical progress changes.

Figure 1. Growth Pattern



Based on the South Korean experience, it appears the period of high growth experienced from 1960 – 1990 may have been similar to this transitional phase (albeit, a longer period). If the economy is to regain more rapid growth, then technical progress will have to increase or the economy will be subject to rather lengthy periods of slow growth until a new wave of investment is undertaken.

In South Korea, there have been several issues that have impeded technical progress. The impact of the favoritism enjoyed by the chaebol should not be ignored. Because these giant enterprises were granted special privileges in access to capital, there was little incentive to innovate. Also, small and medium sized firms were at a disadvantage in acquiring capital to develop new products and new markets, thus stifling a possible pressure point to impose technical progress on all producers. Consider the example of the South Korean attempts to enter the world automotive market. Rather than attempting to develop a new product line or to offer better quality products, Hyundai and others entered the U. S. market with a product that was already behind competitive models from Japanese, German, and U.S. producers. This approach made success unlikely because the only competitive factor is low price. Lower prices can work if consumers perceive comparable (or at least acceptable) quality and features. For the most part, that was not true and the South Korean models did not sell well within the largest automotive market in the world.

OUTLOOK FOR FUTURE

While the United States has been very interested in the economic well being of South Korea, the leading force in dealing with the economic problems has been the International Monetary Fund (IMF). One of the crucial issues for the IMF is to stabilize the international financial conditions such

that changes in exchange rates and capital flows occur in an orderly manner rather than rapidly shifting due to speculative activity based on issues rather than sound economic decisions. Some of the reforms imposed on South Korea as a part of the financial bailout have been very positive. The imposition of financial services restructuring has been long overdue in the South Korean economy. In past years, the financial services sector has been treated as an instrument of industrial policy whose main responsibility was to provide capital for continued expansion of the industrial base. In many cases such expansion were not based on a sound analysis of market conditions. Corporate debt skyrocketed with debt/equity ratios that were untenable. Thus the reform of the corporate sector should lead to improvements in decision-making, as firms are required to lower debt and become more open to public scrutiny.

When the Savings and Loan crisis hit the United States in the 1980s, a critical element of recovery was changes in the capital markets that allowed the infusion of new capital into those institutions that were struggling. Now, the reforms are encouraging the infusion of foreign capital, particularly U.S. capital into the South Korean banking system. The result should be improved technology, sound lending practices, and better banking services that will form the cornerstone for future growth.

Although many important issues are yet to be resolved, there are some signs of improvement. Forecasters are generally calling for economic expansion of perhaps 2% in 1999 after the disastrous decline of 6 percent in 1998. The unemployment rate has risen to 8.7 percent and is unlikely to fall quickly until the overall structural changes begin to form the basis for long-term growth. While such high levels of unemployment are difficult for the average worker, the labor reforms that have allowed such levels will be the basis for long run movement towards a more stable economy.

Foreign investors have returned to the Seoul stock exchange in the last year. That has fueled a large increase since the lows of 1998. Years of trade deficits have been turned around with a record $ 39.9 billion surplus in 1998. That assures that any default on foreign debt is highly unlikely and thus record foreign investment of $15 billion is expected in 1999.

SUMMARY AND CONCLUSIONS

The close relationship of the United States and South Korea will continue to be of strategic importance. North Korea has very grave economic problems of its own, but continues to pose a military threat to South Korea, particularly as it continues efforts to build a nuclear capability. It is very important that the South Korean economy resume solid growth as an example of the possibilities of a freer society in contrast to the Communist dictatorship of North Korea.

The reforms that have resulted from the economic crisis that began in 1997 can be the basis for a brighter future for the country if fully implemented. The election of Kim Dae-jung as President has established the basis for a more democratic society and the imposition of economic reforms can be the basis for a more modern economy that suffers from less central direction. Markets that are more open, a smoothly functioning financial sector and a corporate sector that focuses on competitive products while limiting costs will all be necessary for a healthy economic revival.

There will likely be short run pain for the average workers of South Korea. Productivity gains must be the basis of pay raises and employment must be based on demand for goods and services not

the traditional concept of guaranteed employment. In many cases the proposed reforms will be painful but successful implementation can lead to a bright future that will be more stable.

REFERENCES

Choe, Jong Hwa, "U.S. – Korean Trade Relations – A Korean Perspective", Korea's Economy 1996, pp. 78-81, Korean Economic Institute of America, Washington, DC.

"Economic Growth in Asia", Economic Policy Forum, World Bank Development Economics www.stern.nyu.edu/~nroubini/asia/asiahomepage.html#intro1

Kim, Eun Mee, "The *Chaebol*", ", Korea's Economy 1996, pp. 78-81, Korean Economic Institute of America, Washington, DC.

Kim, Jong-Il and Lawrence J. Lau, " The Sources of Economic Growth of the East Asian Newly Industrialized Countries," Journal of the Japanese and International Economies, Vol. 8 (September, 1994), pp. 235-271.

Krugman, Paul, "Asia's Miracle is Alive and Well? Wrong, It Never Existed", Time, September 29, 1997.

Lee, Kyu Uck, " Structural Problems in the Korean Economy", Korea's Economy 1996, pp. 18-22, Korean Economic Institute of America, Washington, DC.

Oh, Jong Nam, " Korea's Financial and Corporate Restructuring Program", Korea Economic Update, Korea Economic Institute of America, Volume 9, Number 2, May 1998.

Roubini, Nouriel, ´An Introduction to Open Economy Macroeconomics, Currency Crises and the Asian Crisis", www.stern.nyu.edu/nroubini/notes/macrol.htm.

Sommer, Theo, "To Prove Superiority", Digital ChosunIlbo: English Edition. www.chosun.com/w21data/html/news/199903/199903180400.html

Veale, Jennifer, " Is this Recovery For Real?", Business Week, January 25, 1999, pp 54-55.

PERFORMANCE IN ECONOMICS AND ECONOMIC EDUCATION: DOES FAMILIARITY BREED CONTEMPT OR COMMITMENT

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INTRODUCTION

The conventional wisdom is that many students have a perception of economics as both difficult to understand and of little practical value to the average person. To the extent that this opinion holds true it would translate into a negative attitude toward economics as a subject. The purpose of this study is to determine precisely what student attitudes toward economics are and if those attitudes are changed by formal exposure to the discipline. Further, were there any differences in attitude toward the teaching of economics and where economics belongs in the overall curriculum. Three very different groups of students were examined for this study.

The first group consisted of inservice classroom teachers in grades Kindergarten through Junior College. These experienced educators were earning graduate credit for advanced studies in economic education. The majority, 87%, had some previous course work in economics or economics for teachers. A sub-group included inservice teachers attending a seminar or noncredit workshop in either Texas or Arkansas was included it the study. These workshops are sponsored by their respective state councils on economic education and by a center for economic education at either Arkansas State University in Jonesboro or Lamar University in Beaumont, Texas.

Group II consists of elementary education majors enrolled in a required course called Economics for Elementary Teachers. The purpose of this course is to provide preservice elementary education majors with some basic background in Economics and instruction in teaching materials and methods relative to economics in the Kindergarten through grade six curriculum.

Group III consists primarily of business students enrolled in a basic principles of microeconomics course. This class primarily served students pursuing a business major along with a few majoring in social studies and engineering. It would seem that the attitudes toward economics could vary dramatically among the three groups of students.

RESEARCH DESIGN

Eight different groups with five different instructors were the subjects of this study. A total of 306 subjects were included in the study, which was conducted during the Spring and Summer semesters of 1998. Group I consisted of 86 preservice teachers from 18 different school districts in northeastern and central Arkansas. Four different instructors were used in this course. Another 40 teachers, who were workshop participants from Texas, were joined by 52 teachers from Arkansas workshops in economics for teachers. Group II consisted of 26 preservice teachers, taught by Dr. Jerry Crawford, and another 85 preservice teachers taught by Dr. Larry Dale in economics for

teachers at Arkansas State University. Group III contained 21 students enrolled in Microeconomics (Principles) and taught by Dr. Crawford.

The students came from varied backgrounds with different majors. The researchers were interested in exploring the values and characteristics that contribute to the attitudes and aptitude of students under these widely varied circumstances. The independent variables examined included; sex, age, occupation, previous courses in economics, previous courses in business, four attitudes toward economics in the curriculum responses, one personal attitude toward economics and thirty questions related to specific cognitive subjects in economics and the curriculum. These were compared against the dependent variable of the difference between the mean pre-course score and post-course test score.

The study included several additional attitudinal factors such as; enjoyment of the course, usability of the information and grade expected. All of the attitude factors were rated on a five-point scale from strongly agree strongly to disagree, with three representing no opinion. A list of twenty-one basic economic concepts was also presented and subjects were asked to identify where these should be placed in the curriculum, if at all. A response of 0 indicated this concept should not be placed at the pre college curriculum, a response of 2 would indicate that the concept could be introduced in the primary grades, a 3 intermediate grades, a 4 grades seven-nine and a 5 at the high school.

RESULTS

First a standard t-test, testing the null hypothesis that the post course scores are equal to the pre-course scores, revealed that statistically significant improvements in the mean score of all three tested groups had occurred.

A chi square comparison of the means for the three groups on the TEL suggested no significant difference in their performance. The highest post test mean (31.41 or 74.8%) was for the Inservice teacher group I followed by (30.77 or 73.3%) for the preservice teacher group and (28.46 or 67.8%) for the microeconomics students. This is an important finding since the economic education courses cover less cognitive material than the principles course, because they must include some coverage of curriculum matters. Past studies, conducted by this researcher, indicate that despite less coverage the teacher groups out perform regular principles groups because of the practical nature of the instruction.

When it was discovered that 32% of the microeconomics students had no previous courses in economics, possibly putting them at a disadvantage on this test of combined macro-microeconomics, they were run as a separate group. They had a pre-course mean of 21.22, as compared with 24.06 for those with previous courses, and a post-course mean of 22.02. Both differences proved to be statistically significant so that the two groups were run separately for the remainder of the study.

PERSONAL CHARACTERISTICS AND ATTITUDE FACTORS

An educational production function that allows for simultaneous determination of cognitive and attitudinal responses were conducted. Cognitive and attitudinal responses are assumed to be

simultaneously formed as specified in Grimes ect. (1989). The estimated equation provided a significant F-statistic and acceptable cross-sectional Adjusted R2. Examination of the Adjusted R2 values reveals that both cognitive performance and attitude responses explain a greater proportion of the observed variations in student scores for the teacher groups than for the microeconomics groups. It appears that the learning and attitude formation process involves more complex factors among the group of microeconomics students. That would seem reasonable since the class is less focused and the interest, occupationally and intellectually, more varied among that group which included students from three colleges and 7 degree programs across campus.

The regression analysis also examined the influence of the following independent variables;

SEX. The inservice teacher and microeconomics groups were evenly matched, with females making up 56% of the subjects, which is consistent with the makeup of the general student population. The preservice teacher group, made up of future elementary teachers, was predominantly female at 94%. Sex was not a significant factor in either student performance or attitude toward economics.

OCCUPATION. Occupational status was extremely significant in that educators were more likely to support the use of economics in the curriculum, particularly at the elementary grade levels, than were other occupations. The educators were also more likely to rate specific economic terms as usable at both the elementary and secondary levels. No significant difference in the ratings of teachers from Arkansas and Texas was discovered.

Despite the significant difference in the ratings, a majority of the members of all groups were supportive of the presentation of significant amounts of economic content at the precollege level.

No significant difference was discovered in the performance of any occupational group on the standardized achievement tests at the .01 level.

PREVIOUS COURSE WORK. Previous course work in economics was highly significant as a predictor of success on the TEL, as would be expected, but courses in other business fields was not significant at the .01 level. Student understanding of economics does not benefit significantly from courses taken in accounting, business computers, and other areas of the general business curriculum.

ATTITUDE TOWARD ECONOMICS IN THE CURRICULUM. The three groups universally agreed that all students should have some exposure to economics before graduating from high school, with 91% of all respondents agreeing. The mean response on this question was 4.79 on a five-point scale with 5 representing strongly agree.

The attitudes of the microeconomics students did differ significantly from the teacher groups on the importance of teaching economics in the elementary grades. However, 80% of that group still believed that some economics should be taught prior to the secondary grades. There seems to be a universal recognition that economic subject matter is important enough that all citizens should have a basic understanding of economic concepts and issues.

A standard t-Test, testing the null hypothesis that post-course attitude scores are equal to pre-course attitude scores, determined that attitudes toward economics had proved statistically significant improvements. Not only were people more favorable toward economics as a subject [76.71%] but students came out of the course experience believing that they needed some background in as an individual[63.89%]. They also believed that economics was important in the general curriculum [67.13%] . The teacher groups showed a much stronger gain in favorable attitudes toward economics

than the microeconomics group [91.08% compared with 52.66%]. They also were more likely to include economics in the curriculum and at lower grades than were the microeconomics group. If the economic education program is to be successful, it is critical that teachers have a good attitude toward economics as a subject.

ATTITUDE TOWARD THE PERSONAL VALUE OF ECONOMICS. Students overwhelmingly believed that economics instruction and knowledge had been valuable to them personally [92.34%]. This positive attitude supports the idea that everyone needs some economics instruction. No statistically significant difference was discovered between the attitude rating of high and low achievers on this question.

ATTITUDE TOWARD SPECIFIC ECONOMIC ISSUES. Students were asked to examine a list of economic concepts, from the National Council on Economic Education Framework, and to rate where each concept should be included in the curriculum. The choices included; elementary level (grades K to 6), secondary level (grades 7 to 12), College level, College level (majors only) and none. Less than 3% of the respondents selected the "none" option on any concept so that option was excluded from the study and the table of results (see table 2). A chi square test of significance, at the .01 level, was conducted to determine if there was any significant difference in the way the three groups rated each concept in terms of grade level placement.

The teacher groups were much more likely to introduce concepts into the precollege curriculum than were microeconomics students. Since they had been exposed to grade level appropriateness during the course, they were more familiar with the teaching methods and materials available at all levels. The inservice teachers had frequently taught some economics in their classrooms making them more accepting of early placement of economics. Interestingly, no significant difference between the pre and post course ratings was indicated. Exposure to economics concepts did not make any of the students more or even less accepting of the role economics should play in the overall curriculum. This is due to the fact that students gave economics an extremely high rating on both the pre and post course survey.

The teacher groups were significantly more favorable to the introduction of all economic terms than were the microeconomics group, especially at the elementary level.

The preservice teachers were significantly more likely to introduce the following terms at an earlier age than were the more seasoned inservice teachers; scarcity & choice, productivity, institutions & incentives, supply & demand, income distribution, gross domestic product, trade and inflation.

The inservice teachers were more likely to introduce the following terms than were the preservice teachers; opportunity costs & trade offs, economic systems, exchange, markets & prices, market structures, market failures, government, unemployment and exchange rates.

The teacher groups were in relative agreement on most economic topics and differed significant from the microeconomics group on both elementary and secondary level placement of terms and concepts. The micro group stated that ten concepts should not be introduced until the secondary curriculum including; productivity, markets, market structure, income distribution, market failures, GDP, inflation, trade, stabilization and exchange rates.

Trained teachers have a more positive and realistic attitude toward economics in the k-12 curriculum. Their opinions about economics are in close agreement with the placement advice

offered by economics expert from the National Council on Economic Education as represented in the Scope & Sequence book.

The difference between teachers in Arkansas and Texas was not significant except on three concepts; Gross Domestic Product, market failures and aggregate supply and demand. Teachers from Arkansas were more likely to attempt those concepts at an earlier point in the curriculum. The Texas teachers' opinions' on those three topics was more in keeping with that of the economics experts. This is a sign that we are teaching the same basic ideas in different center-sponsored programs in our respective states.

A special survey was conducted with the subset of group I, preservice teachers enrolled in a seminar or workshop, with some interesting results. Table III displays the difference between the Texas and Arkansas Group on these special topics. Arkansas teachers were more likely to include some emphasis on economics in their curriculum, but both groups agreed that they would include the study. The Arkansas teachers were more aware of state requirements in economics instruction. Arkansas has embarked on a state wide campaign and most districts are required to hold workshops in which attendance is mandatory for all faculty. This has proven advantageous in recruitment of teachers for workshops since economics is a significant part of the required social study's curriculum and student testing for grades Kindergarten through eight. Otherwise, there was no significant difference between teacher attitude on economics in the curriculum. All groups of teachers planned to include more economics in their class lessons as a result of the workshop by an overwhelming 97%.

CONCLUSIONS

Studying economics had no statistically significant effect on the attitude of students toward the importance of economics or on their grade level placement in the curriculum. This was primarily because students were very positive in their attitude toward economics on both the pre and post course survey. Evidently all students are becoming more aware of the important role that economics plays in current affairs and have discovered the value of universal economic literacy.

This study does suggest that teachers, and those training to be teachers, have more confidence in the ability of younger students to understand basic concepts than students in the regular principles course. Interestingly, little disagreement was noted over the introduction of most of the basic concepts listed for the secondary curriculum.

This study discovered very little difference in attitude as the result of sex or previous courses taken. It is significant that the main predictor of success on the TEL was the number of previous economics courses taken. Obviously the more economics one is exposed to the more they learn and retain.

The result of the concept placement analysis indicates that the economic education program is helping education majors with the appropriate grade placement of material. Student findings correspond closely with grade placement decisions made by experts as suggested by the Scope and Sequence evaluation of selected economic education experts. Overall, Teachers in both inservice and preservice programs had a good understanding of the grade appropriateness of most concept after completing a course or seminar in economics. Previous studies have shown that this is not true of

the general teacher population (Becker, 1983 and Gilliard, 1989). We are making a difference in preparing teachers for the global economy so that they may prepare their students.

REFERENCES

Banathy, B. Instructional Systems Design. In R. Gagne (Ed.) Instructional Technology: Foundations. Hillsdale, NJ: Lawrence Erlbaum, 1987, 85-113.

Becker, W. E., Jr. 1983. Economics education research: Part III, statistical estimation methods. Journal of Economic Education 14 (Summer): 4-15.

Charkins, R. J., D. M. O'Toole, and J. N. Wetzel. 1985. Linking teaching and student learning styles with student achievement and attitudes. Journal of Economic Education 16 (Spring): 111-20.

Clark, C., & Lambert, M. (1986). The study of teacher thinking: Implications for teacher education. Journal of Teacher Education, 37(5), 27-31.

Fidel, J. L., and J. D. Johnson. 1996. The effect of macro/micro course sequencing on learning and attitudes in principles of economics. Journal of Economic Education 17 (Spring): 87-98.

Glazer, R., & Natch, A. J. (1991). Measurement in learning and instruction. In R. L. Thorndike (Ed.), Educational Measurement (2nd ed., 625-670). Washington, DC: American Council on Education.

Grimes, P.W., et. al. 1989. The Effect of Economic U$A on Learning and Attitudes. Journal of Economic Education 20 (Spring):139-152.

National Council on Economic Education, National Content Standards in Economic, New York, 1997.

Saunders, Phillip and June V. Gilliard, A Framework for Teaching Basic Economic Concepts. New York; Joint Council on Economic Education, 1995.

TABLE I
PLACEMENT OF ECONOMICS CONCEPTS IN THE CURRICULUM
Post Course Attitude Survey

CONCEPT	**GROUP I**			**GROUP II**			**GROUP III**		
	K-6	**7-12**	**COLL.**	**K-6**	**7-12**	**COLL.**	**K-6**	**7-12**	**COLL.**
SCARCITY & CHOICE	*52%	26%	17%	*65%	12%	12%	24%	24%	48%
OPPORTUNITY COSTS & TRADE OFFS	*62%	19%	15%	*56%	22%	6%	6%	56%	31%
PRODUCTIVITY	*44%	31%	23%	58%	17%	5%	0	57%	23%
ECONOMIC SYSTEMS	41%	12%	4%	*35%	35%	23%	11%	51%	29%
INSTIT. & INCENTIVES	66%	12%	16%	*76%	5%	5%	23%	52%	11%
EXCHANGE MONEY & INTER.	*57%	29%	14%	*47%	29%	11%	17%	47%	22%
MARKETS & PRICE	*44%	26%	26%	*29%	35%	17%	0	51%	29%
SUPPLY & DEMAND MARKET	*48%	30%	19%	*76%	11%	5%	4%	40%	40%
STRUCTURES INCOME	*37%	27%	33%	*17%	41%	17%	0	35%	35%
DISTRIBUTION	*27%	45%	30%	*35%	23%	23%	0	40%	29%
MARKET FAILURES	23%	30%	30%	*17%	11%	47%	0	40%	29%
ECONOMIC ROLE OF GOVERNMENT	19%	33%	37%	*17%	22%	51%	0	70%	17%
GROSS DOMESTIC PRODUCT	*11%	37%	41%	*41%	29%	17%	0	23%	47%
AGGREGATE SUPPLY & DEMAND	11%	30%	12%	*17%	29%	23%	0	16%	45%
UNEMPLOYMENT	*37%	30%	30%	*35%	41%	11%	5%	70%	11%
INFLATION	*27%	37%	23%	*41%	29%	17%	0	47%	29%
MONETARY POLICY & FISCAL POLICY	11%	37%	41%	*5%	52%	17%	4%	16%	51%
TRADE	*48%	19%	27%	*49%	21%	11%	0	51%	28%
EXCHANGE RATES	19%	27%	41%	*17%	35%	23%	0	22%	51%
NATIONAL DEBT	15%	41%	30%	11%	5%	29%	4%	47%	23%

*Significant at the .01 level.

TABLE II
STUDENT RESPONSES

	SEX	OCCUPATION				PREVIOUS ECONOMICS				
	% FEMALE	STUDENT	EDUCATOR	RETAIL	MAN/SER.	0	1	2	3	4 & UP
GROUP I	56.5%	13%	87%	-	-	31%	45%	20%	-	4%
GROUP II	94%	76%	24%	24%	-	75%	19%	6%	-	-
GROUP III	56%	81%	-	6%	12%	25%	56%	6%	6%	6%

	PREVIOUS BUSINESS COURSES					ALL STUDENTS SHOULD HAVE BASIC ECONOMICS BEFORE GRADUATION		
	0	1	2	3	4 & UP	AGREE	NO OPINION	DISAGREE
GROUP I	33%	46%	21%	-	-	88%	-	12%
GROUP II	75%	19%	6%	-	-	87%	-	13%
GROUP III	25%	56%	6%	6%	6%	100%	-	-

TABLE II
STUDENT OPINIONS ON INCLUSION IN THE CURRICULUM

	ALL ELEMENTARY STUDENTS SHOULD HAVE SOME BASIC ECONOMICS INSTRUCTION			ALL TEACHERS SHOULD HAVE BASIC ECONOMICS BEFORE GRADUATION		
	AGREE	NO OPINION	DISAGREE	AGREE	NO OPINION	DISAGREE
GROUP I	88%	-	12%	92%	-	8%
GROUP II	87%	-	13%	93%	-	7%
GROUP III	80%	-	20%	88%	6%	6%

LESS THAN 10% OF THE RESPONDENCE FELT THAT THEY HAD NOT BENEFITTED FROM INSTRUCTION IN ECONOMICS.

	COGNITIVE PERFORMANCE		ATTITUDE RESPONSE	PREVIOUS ECONOMICS
	F	ADJUSTED R2	F	ADJUSTED R2
GROUP I	15.622	.506	12.444	.571
GROUP II	18.055	.521	13.899	.603
GROUP III	13.553	.434	9.877	.462

TABLE III
SPECIAL STUDENT SURVEY

Prior to this conference, which of the following best describes your experience with economics?

Opinion	**Texas**	**Arkansas**
1. Never included Economics	8.2%	11.01%
2. Included very little Economics	-0-	2.3%
3. No opinion	-0-	-0-
4. Include some Economics	74.52%	41.3%
5. Include a great deal	8.2%	45.4%

Has this workshop changed your attitude toward including economics in your curriculum?

Opinion	**Texas**	**Arkansas**
1. No, No Econ. included	-0-	-0-
2. Some what, will included some	4.8%	2.1%
3. No opinion	-0-	1.8%
4. Yes, Include some	19.01%	11.14%
5. Yes, Include a great	76.12%	83.6%

Were you aware of state requirements regarding student testing and the teaching of economics?

Opinion	**Texas**	**Arkansas**
1. No	11.03%	.98%
2. Some what	21.07%	1.86%
3. No opinion	-0-	1.86%
4. Yes, not to extent	45.83%	22.14%
5. Yes	21.07%	73.16%

CUTTING THE DIAMOND OF COMPARATIVE ADVANTAGE

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ABSTRACT

This paper addresses pedagogical issues pertaining to the principle of comparative advantage. It specifically advocates the rejection on the labor per unit of output approach in favor of the output per unit of labor approach in teaching the principle. The output per unit of labor approach is preferred for its direct connections to opportunity cost, the ability to easily incorporate visual pedagogical tools, its connection to discussions of the role of theory, its ease of understanding, and its potential to increase retention of the principle. The paper provides a specific example of the approach. Suggestions for further research on the effects of the output per unit of labor approach are also included.

INTRODUCTION

David Ricardo left economists an intellectual legacy upon which the foundation for mutually advantageous trade rests[1]. Comparative advantage stands as a monument not only to Ricardo, but also to the practice and methods of economics itself. In our attempts to help students to appreciate and embrace the principles of economics, teaching comparative advantage represents a splendid opportunity to display the logical method and power of economic theory.

The ramifications of comparative advantage on the overall levels of efficiency and wealth of an economy are well-known to economists. Voluntary transactions based upon relative efficiencies in production serve to allocate resources more efficiently in a market economy. The populus of a modern democracy with an advanced, industrialized economy can ill-afford to ignore the advantages which accrue through specialization and exchange. Unfortunately, it is our observation that students often fail to understand comparative advantage as an important economic principle underlying the intellectual foundation for gains from trade. Another important reason to dispel confusion is that comparative advantage remains as a fundamental intellectual bulwark against protectionism. As nations continue to expand their roles in the international economy, an educated populus must understand the tradeoffs that are made when any trading entity chooses to forgo trade.

The predominant method of presenting comparative advantage is based upon a labor per unit of output approach. In Ricardo's original work and in many leading undergraduate texts the first exposure to absolute and comparative advantage is often based upon this reference to labor productivity. It is our experience that students are easily confused in their initial exposure to comparative advantage due to the implicit reference to labor productivity inherent to the analysis.

An alternative approach is to couch the initial exposure to absolute and comparative advantage - simply and directly - in terms of opportunity costs[2]. This method is based upon the number of units of output per unit of labor and it links more directly to the conceptual foundations of the production possibilities curve. The logical difference is, for professional economists, a matter of simple conversion. However, we maintain that the pedagogical effects are significant.

The advantages of the alternative approach (output per unit of labor) are numerous. First, the output per unit of labor is firmly anchored in an even more fundamental principle in economics - opportunity costs. Opportunity costs are intuitively understood, lively examples abound, and students are able to relate their calculations to their personal experiences. Second, the approach directly incorporates a graphical exposition of the production possibilities curve. The complementarities between verbal and visual approaches are well-documented[3]. Third, it is less obtuse to students. We have found that the approach better provides the opportunity to help students to understand the inevitable tradeoff between realism and applicability; a problem that haunts economics in the minds of many university and college students. Fourth, the approach begs a discussion of the labor per unit of output approach and does nothing to hinder a subsequent presentation of it. Fifth, and most importantly, it is our observation that students more clearly understand comparative advantage, that their retaintion of the principle and their ability to transfer it are improved.

OUTPUT PER UNIT OF LABOR

	Pizza	Sundaes
Sue	3.00	4.00
Bert	2.00	6.00

(figure 1)

An example of the method by which comparative advantage is presented under the output per unit of labor approach follows: Sue and Bert are going to throw a party and the menu consists of pizza and ice cream sundaes. First, we construct a matrix (figure 1) which presents the basic production information. The numbers within the matrix represent the quantity of items which each can produce using one unit of labor; in this case one hour. The matrix is clearly labeled as output per unit of labor and a brief explanation concerning the choice of labor unit ensues -- e.g., any labor unit can be used so long as both parties use the same measure.

Based upon the information in the matrix, Sue can produce either 3 pizzas or 4 sundaes and Bert can produce either 2 pizzas or 6 sundaes. Absolute advantage can be easily explained at this point. If Sue can produce three pizzas and Bert can produce only two, a direct comparison of the production capabilities of each reveals that Sue ought to produce pizza. If Sue can produce four sundaes whereas Bert can produce six, then a direct comparison of the production capabilities of each reveals that Bert ought to produce sundaes. Students are then asked to determine the trading patterns using the following production information[4].

OUTPUT PER UNIT OF LABOR

	Pizza	Sundaes
Sue	3.00	6.00
Bert	2.00	6.00

(figure 2)

For pizzas, the production information is the same. Hence, there is no change in the production assignment. In the case of sundaes, however, a dilemma is presented, for the assignment of production is indeterminate under absolute advantage[5]. Because absolute advantage is determined by external costs, and we are looking at the producible commodity across trading entities, we have yet in incorporate internal, domestic, or opportunity costs. To make a comparison based upon opportunity costs requires students to use comparative rather than absolute advantage.

In order to determine trading patterns, we must investigate foregone opportunities within each trading entity based upon internal or domestic costs. Students are reminded that under the concept of opportunity cost, the decision to use one's time to produce pizzas is, after all, simultaneously a decision to not produce sundaes and vice versa. The tradeoff can be made quite explicit by the graphical presentation of the matrix information revealing a constant cost production possibilities curve. Students are reminded that the production possibilities curve for each trading entity holds constant the quantity of resources - specifically the one unit (hour, day, week, etc.) of labor.

Bert and Sue now decide to divide the work associated with their party based upon the principle of comparative advantage. Because each measurement is based upon the same labor unit, we can present their production decision in the following manner.

Sue
3 pizzas = 6 sundaes
or
3/3 pizzas = 6/3 sundaes
or
1 pizza = 2 sundaes

Bert
2 pizzas = 6 sundaes
or
2/2 pizzas = 6/2 sundaes
or
1 pizza = 3 sundaes

Reducing the equation in terms of pizza yields the fact that in the time Sue could make one pizza she must forgo the production of two sundaes, i.e., the production of one pizza has an opportunity cost of two sundaes. For Bert, the production of one pizza has an opportunity cost of three sundaes; in the amount of time Bert can make one pizza he must forgo the three sundaes he could have produced. If Sue must forgo two sundaes for producing one pizza whereas Bert must forgo three, then Sue is obviously the low-cost producer of pizzas. It would certainly be to their advantage to be giving up two sundaes rather than three sundaes for each pizza made.

What about the sundaes?

Sue	**Bert**
6 sundaes = 3 pizzas	6 sundaes = 2 pizzas
or	**or**
6/6 sundaes = 3/6 pizzas	6/6 sundaes = 2/6 pizzas
or	**or**
1 sundae = 1/2 pizza	1 sundae = 1/3 pizza

Reducing this equation yields the fact that producing one sundae has an opportunity cost of one-half of a pizza for Sue - in the time she can make one sundae she must forgo the production of one-half of a pizza. For Bert, the opportunity cost of producing one sundae is one-third of a pizza. If the cost to Sue of producing one sundae is 1/2 of a pizza while the cost of Bert producing one sundae is 1/3 of a pizza, then Bert is clearly the low opportunity cost producer. It would certainly be to their advantage to be giving up 1/3 of a pizza per sundae as opposed to giving up 1/2 of a pizza per sundae.

A number of other aspects can be easily incorporated into the discussion at this point. Nearly always included are: the irrelevance of the labor or trading unit chosen, the symmetry of the calculations for each party, and the political economy of trade. The later category offers two clear opportunities from a pedagogical perspective. First, one can easily address the multitude of issues which enter into real-world trade negotiations. Bargaining theory, international relations, public choice issues, and resistance to trade by some groups are all topics deserving discussion. Second, these topics nearly always act as a conduit into current issues which face our political decision-makers; hence, the discussion often taps into the students' existing "learning set".

sTUDENTS CAN THEN BE ASKED to determine exactly how many units of output Bert and Sue would need for their party. Regardless of the numbers chosen, it can always be shown that following comparative advantage is superior to its violation. For example, suppose that Sue and Bert have determined that they will need six pizzas and eighteen sundaes. Following comparative advantage, we would assign Sue the task of making pizzas and Bert the task of making sundaes. Sue would produce the six pizzas in two hours, and Bert would produce the eighteen sundaes in three hours. Thus, they spend five labor hours in preparation for the party. If we violate comparative advantage and have Bert make the pizzas and Sue make the sundaes, the preparation takes three and three hours respectively; they will spend six hours performing the exact same task.

At times, students have questioned the "fairness" of the one-sided reduction in work effort. This can be treated as an opportunity to discuss the vantage point of the principle of comparative advantage. When economists speak of the gains from trade, those gains accrue to the society - to the community as a whole. While there can be winners and losers at the sub-societal level, in a world of scarcity, the collective "we" can only benefit from trade. Certainly, a cursory review of trade negotiations points to the inevitability of issues of distribution being considered - but it also seems clear that comparative advantage is important enough to be considered on its own grounds. Namely, the efficacy of an economic system.

Numerous extensions of comparative advantage are possible. The horizontal expansion of the production information matrix allows one to demonstrate decreasing and increasing costs. Implicit assumptions concerning subjects such as the employment levels and homogeneity of factors, varying cost conditions, and the labor theory of value impact the analysis and can be made explicit.

Though, it is our experience that from a pedagogical perspective, it is better to address these issues in subsequent treatments of the relationships between these issues and comparative advantage. For instance, in one of the author's International Economics course, after absolute advantage is presented, he often produces a list of major problems and resolutions in turn. First, absolute advantage fails to provide a consistent explanation of trade patterns when one trading entity has the advantage in both products. This is solved by resorting to opportunity costs and comparative advantage. Second, constant costs produce horizontal cost curves and complete specialization[6], which are unrealistic. This can be addressed through the introduction of the influence of the shapes of cost curves on trading patterns incorporating isoquant analysis and current theoretical discussions on the role of increasing costs. Third, the calculations are based solely on cost conditions: we are implicitly accepting the labor theory of value. Consistent use of the matrix approach allows one to easily extend the discussion to incorporate the average cost of production approach which is mutually determined by cost and demand conditions. In addition, the homogeneity of labor can be dropped as an assumption in this step. In international trade courses, the influence of exchange rates upon trading patterns can easily be made explicit.

SUGGESTIONS FOR RESEARCH

A brief review of leading undergraduate textbooks reveals that a majority present comparative advantage using the labor per unit of output approach. One obvious research project would be to compare the effects of pedogogical approach on subsequent student knowledge of comparative advantage. Given that students face at least two sources of information in each course - the textbook and the professor - one would have to control for the approach of each. The widespread existence of standardized tests of economic knowledge such as the Test of Understanding in College Economics could be incorporated to test both short-term and long-term retainment of the principle.

Another interesting research project would be to compare attitudes towards free trade, pre- and post-comparative advantage exposure. Again, controlling for the method of approach at the textbook and professor level would be important. Ultimately, if we are successful in teaching comparative advantage, its importance and relevance ought to be reflected in the attitudes of those exposed to its implications.

CONCLUSION

Though recent developments in international trade theory have attacked the static nature of Ricardian comparative advantage, a clear reading of this literature indicates that the crucial questions involve the conflict between static and dynamic analysis and the role of government intervention in the international trading system -- it is not a question of whether or not comparative advantage is relevant[7]. As a fundamental principle of economics, comparative advantage remains as one of the transcendent conclusions of economic logic with wide-ranging ramifications.

Current curricular reform movements call for rethinking traditional teaching methods and an increased awareness of economic knowledge among our populace. The area of international relations and international trade is often cited as one of particular concern for American students. Ignorance

of the gains from trade and the concept of comparative advantage does not bode well for us in an era of increasing international economic activity.

As economists, it is important to subject our teaching methods to our cost-benefit criterion, in the attempt to increase pedagogical effectiveness. This paper calls for a specific and progressive order of approach in teaching the principle of comparative advantage which is designed to increase student comprehension. It incorporates previously developed principles and tools, opportunity costs and the production possibilities curve, as anchors for student learning. It is also designed to allow for the subsequent relaxation of restrictive assumptions while making clear that specialization and trade lead to gains from the societal perspective.

NOTES

1.Substantial credit has been given to both Richard Torrens (Spiegel 1983) and James Mill (Thweat 1976) by historians of economic thought for anticipating or co-discovering this principle.
2.At least three leading textbooks do adopt this approach: Colander 1997, McEachern 1998, and Parkin 1997.
3.Saunders and Walstad (1990) provide a concise summary discussion of the relationship between visual and verbal modes of information processing in Chapter 7 - Learning Theory and Instructional Objectives.
4.This is often an exercise which lends itself well to a small group discussion context.
5.Often, as we revisit comparative advantage, absolute advantage is given to one trading entity for both goods to place emphasis on this problem.
6.Except in the case of identical production costs, where the pattern of production can not be determined by comparative or absolute advantage.
7.See Krugman (1992) for a current, broad discussion of the "new trade theory" and its implications for trade policy.

REFERENCES

Baumal, William J. and Blinder, Alan S. 1997. *Economics: Principles and Policy*. 8th. ed. San Diego: Harcourt Brace Jovanovich.

Colander, David C. 1997. *Economics*. Homewood, IL: Irwin.

Gwartney, J. D. and R. L. Stroup. 1997. *Economics: Private and public Choice*. 8th. ed. San Diego: Harcourt Brace Jovanovich.

Krugman, Paul. 1992. Does the New Trade Theory Require a New Trade Policy? *The World Economy* 15 (July): 423-41.

McConnell, Campbell R. and Stanley L. Brue. 1996. *Economics.* 13th. ed. New York: McGraw-Hill.

McEachern, William A. 1991. *Economics: A Contemporary Introduction.* 2nd. ed. Cincinnatti: South-Western.

Miller, Roger Leroy. 1991. *Economics Today*. 7th. ed. New York: HarperCollins.

Parkin, Michael. 1998. *Economics.* Reading, MA: Addison-Wesley.

Pindyck, Robert S. and Rubinfeld, Daniel L. 1996. *Microeconomics*. 3rd. ed. New York: Macmillan Publishing Co.

Ricardo, David. 1817. *The Principles of Political Economy and Taxation*. 1960 ed. London: The Aldine Press.

Saunders, Phillip and Walstad, William B. 1990. *The Principles of Economics Course: A Handbook for Instructors*. New York: McGraw-Hill Publishing Company.

Spiegel, Henry William. *The Growth of Economic Thought.* 1983. Durham, NC: Duke University Press.

Thweatt, William. 1976. James Mill and the Early Development of Comparative Advantage. *History of Political Economy* 2 (Summer): 207-34.

PROGRAM EVALUATION AND DELIVERY IN ECONOMIC 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 nation's schools.

Teaching economic education introduces students to a highly useful way of thinking about basic issues in an economic world. An understanding and application 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;
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 nation's 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, p. 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, p.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, p. 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 application 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, p. 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. (p.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, p. 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, 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 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; 12.0% (44) grade 7; 10.3% (38) grade 6; 9.0% (33) grade 8; 8.7% (32) grade 3; 7.1% (26) grade 2; 6.5% (24) grade 5; 4.6% (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

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

n=368

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

Table 2 illustrates the frequency and valid percent by subject area(s) of the survey respondents.

Table 2

Subject Area(s)

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

n=386

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."

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 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?

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.	1297	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

n=368

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?

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
n=368			

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 survey respondents and will assist the ISU Center for Economic 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. Naturally, the principal, superintendent, or curriculum director would respond to the questionnaire from an administrative viewpoint. These data would provide valuable 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.

REFERENCES

Brenneke, J.S. (1992). An Economy at Risk: The Case for Economics Education. The Society of Economics Educators.

Carlson, J. A., & Schodt, D.W. (1995). Beyond the lecture: Case teaching and the learning of economic theory. Journal of Economic Education, 26, 17-28.

Hallows, K., & Solomon, W. (1991). Deep and core competencies in economics for Missouri school districts. In W. B. Walstad & J.C. Soper (Eds.), Effective Economic Education in the Schools, (pp. 164-179). Washington, DC: National Education Assoc.

Hermanowicz, H. J. (1991). Recommendations for teacher education in the context of the reform movement. In W. B. Walstad & J. C. Soper (Eds.), Effective Economic Education in the Schools (pp. 70-80). Washington, DC: National Education Association.

Highsmith, R. J. (1989) A survey of state mandates for economic instruction. Excellence in Economic Education. Joint Council of Economic Education (JCEE) and The NFBI Foundation.

Miller, S. (1991). The case for economic education in the school curriculum. In W.B. Walstad & J.C. Soper (Eds). Effective Economic Education in the Schools, (pp. 35-48). Washington, DC: National Education Association.

Norusis, M.J. (1995). SPSS 6.1 Guide to Data Analysis. Engelwood Cliffs, NJ: Prentice Hall.

Schug, M.C. (Ed.) (1985). Economics in the school curriculum, K-12. Washington, DC: The National Education Association.

Sisco, B.R. (1991). Forum, panel, and symposium. In M.W. Galbraith (Ed.). Adult Learning Methods: A Guide for Effective Instruction, (pp.283-302). Malabar, FL: Krieger Publishing.

QUALITY INDICATORS IN ELECTRONIC COMMERCE: A CASE STUDY

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ABSTRACT

Efficient market functioning requires well informed participants. The modern theory of information places primary emphasis on the role of asymmetric information and adverse selection in producing inefficient market outcomes. This paper focuses specifically on the problem of inadequate buyer information regarding the quality of a product purchased from a seller via the Internet. Despite the advantage enjoyed by electronic commerce in comparison to conventional modes of commerce in the delivery of just this commodity-information-these markets do not eliminate many sources of market inefficiency arising from information asymmetries. Indeed, such problems may be compounded by the character of electronic transactions.

This paper reviews the relevant literature, beginning with Akerlof's (1970) statement of what has come to be known as the "lemons problem". We then survey briefly the potential solutions to such a problem, with emphasis on those most frequently observed in electronic commerce. This review relies heavily on the overview provided by Whinston, Stahl and Choi (1997). We then turn to the major objective of the paper, which is to report the results of a study that examines these issues as they arise in one type of transaction conducted on Ebay, the very successful (and, lately, very newsworthy) World Wide Web auction site.

An important service offered by Ebay is a bulletin board style feedback system by which members of the"the Ebay community" may report on various aspects of their Ebay transactions, including feedback regarding the quality of a seller's merchandise and service. Ebay publishes the feedback ratings of each seller as part of its listing of any item for sale and also disciplines sellers that accumulate too much negative feedback. This would seem to provide buyers with some degree of protection from unscrupulous sellers. My study examines the impact of the amount and quality of the bulletin board feedback on realized auction prices in an attempt to discern whether and how bulletin board feedback is utilized. The market that is studied is the market for American art pottery. While this provides only a case study, it hopes to shed light on some important aspect s of this relatively new phenomenon.

REFERENCES

Akerlof, G. (1970). The Market for Lemons: Quality Uncertainty and the Market Mechanism, *Quarterly Journal of Economics, 84*: 488-500.

Whinston, A., Stahl, D. & S. Choi. (1997). *The Economics of Electronic Commerce*. Indianapolis: MacMillan Technical Publishing.

ACTIVE LEARNING AND THE ADVANCED PLACEMENT ECONOMICS PROGRAM

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ABSTRACT

Active learning is a new concept to many academic economists. The significant accomplishments in this area by the National Council on Economic Education and the College Board will be documented, and the Advanced Placement-Economics Program of the College Board will be described.

The most unique aspects of the high school economics classroom are the common sense acceptability of basic economics principles and the lack of economics training of most high school teachers. These aspects have led to the development of "Active Learning": exciting hands-on teaching strategies that are almost self-teaching and fit well into all social studies subject areas.

These techniques are being increasingly used and accepted in the college classroom (see Johnson, 1998a and 1998b). Recent research advances in economic education using active learning will be reviewed, and areas for further research will be explored.

CLASSROOM STRATEGIES USING ACTIVE LEARNING

Active or Cooperative Learning is a set of teaching techniques that has been shown to improve classroom instruction. Measures of its effectiveness include increased retention of facts, increased ability to process information, greater student enthusiasm and participation, and overall increased excitement about learning. The literature of the past decade includes numerous examples of success achieved through Active Learning and few contraexamples. (See, for example, Bergstrom and Johnson, 1994).

This paper will review the key elements of informal active learning. Examples of these techniques that can be used in the typical economics class will be discussed and demonstrated. The Advanced Placement Economics program of the College Board will be discussed to show how active learning techniques can be integrated into the principles of economics course at the college or high school levels.

The key to active or cooperative learning is that the students take an active role in their learning. The basis of active learning is research showing that students learn more and better if they not only hear facts but apply them. They need to take new knowledge and use it to solve a problem or gather new facts. This important step reinforces learning and verifies that the knowledge has been effectively transferred. These techniques help keep the students' attention and reduce the chance that failure to understand one concept will interfere with the learning of the next point. These techniques also deputize all students in the class to reinforce the learning of their fellow students. The traditional lecture is interrupted briefly every 10-15 minutes to perform an informal active learning exercise. (See Johnson, 1998a).

LEARNING OBJECTIVES

A key feature of successful active learning is that the learning objectives are clearly stated and understood by the students. The objectives are stated in terms of what the student should be able to do at the completion of the lesson. The student always will know exactly what he or she will be expected to do at the end of the class to demonstrate competence.

Editors' Note: The full version of the paper describes in detail the active learning process and can be found in the next Edition of the Economics and Economic Education Review or from the author.

"WHERE'S THE BEEF?" ECONOMICS, THE MAIN COURSE, IS MISSING FROM THE NEW TEXAS CORE CURRICULUM

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ABSTRACT

In 1998 the Texas Higher Education Coordinating Board mandated a 42 semester hour Core Curriculum for all institutions of higher learning. An economics course was not mentioned as either a specific course or as an optional course. Yet, Macroeconomics Principles meets all the criteria the Board established for core course selection: (a) that the course develop intellectual skills, and (b) that it be taught in a manner so as to develop students' perspectives and interest in learning. For the past five years, Macroeconomics Principles has been taught as a Core course at Texas A&M University-Corpus Christi. Data reveal that the Macroeconomics Principles course is as important as any other course in the Core curriculum. It is uniquely significant in enhancing the mathematical and critical thinking skill areas, and students perceive that the course contributes to their knowledge and perspectives of the world.

INTRODUCTION

In 1998 The Texas Higher Education Coordinating Board (THECB) mandated that each general academic institution and community/technical college in Texas design and implement a core curriculum with the "Texas Common Course Numbering System," with no fewer than 42 lower-division semester credit hours. Beginning in Fall 1998 THECB Rule 5.402 also provided that core curriculum would be transferable among institutions:

> If a student successfully completes the 42 semester hour credit core curriculum at an institution of higher education, that block of courses may be transferred to any other institution of higher education and must be substituted for the receiving institution's core curriculum. (THECB Rules, 1999, 5.402(d), http)

Early in 1998, THECB Advisory Committee on Core Curriculum set out several guidelines for the development of a state core curriculum. Among them were:

To mandate no fewer than 42 semester credit hours.

To include intellectual skill development across the core curriculum. Basic intellectual competencies would include:

Reading – ability to analyze and interpret a variety of printed materials.
Writing – produce clear, correct, and coherent prose adapted to purpose, occasion, and audience.
Speaking – communicate orally in clear, coherent, and persuasive language appropriate to purpose, occasion, and audience.
Listening – be able to analyze and interpret various forms of spoken communication.
Critical thinking and problem solving – ability to organize and analyze ideas and information – including written texts, visual representations, artifacts, and experimental and statistical materials – using logical methods. Applying both qualitative and quantitative skills analytically and creatively to appropriate subject matter in order to evaluate arguments and to construct alternative strategies. Problem solving is application of critical thinking to address an identified task.
Computer Literacy – ability to use computer-based technology in communication, solving problems, and acquiring information.

3. To provide perspectives on human experiences derived from specific courses.

The core should contain courses that establish multiple perspectives on the individual and the world in which he or she lives and that stimulate a capacity to discuss and reflect upon individual, political and social aspects of life to understand ways in which to exercise responsible citizenship; recognize the importance of maintaining health and wellness; develop a capacity to use the knowledge of how technology and science affect their lives; develop personal values and the ability to make aesthetic judgements; use logical reasoning in problem solving; and integrate knowledge and understand the interrelationships of the discipline.

4. To modify teaching methods:

> Since the objective of disciplinary studies within a core curriculum is to foster perspectives as well as to inform and deliver content, the way the subject is taught is an important as the subject matter itself. Disciplinary courses with a core curriculum should include outcomes focused on the intellectual core competencies as well as outcomes related to establishing perspectives – basic concepts in the discipline methods of analysis and interpretation specific to the discipline. (Working Document, THECB Advisory Committee, 1998, 2-5, http).

Based on these guidelines the State Core Committee chose five component areas of 36 hours, with six additional hours to be added at the discretion of the individual institution. In four of the component areas, specific courses were either mandated (e.g.), Communication included English/rhetoric/composition, and Social and Behavior Sciences included U.S. History and political science, or options were given as in the areas of Mathematics where logic, college-level algebra equivalent, or above, and Humanities and Visual and Performing Arts where literature, philosophy,

modern or classical language/literature and cultural studies were specified. (THECB Rules, 1999, Chart I, http)

The Texas Core Curriculum did not emphasize or suggest in any way that a course in economic principles be included. This omission is regrettable. If other states look to the Texas Core as a model they, too, may ignore economics principles as a valuable core course. Yet, experience after five years of teaching Macroeconomics Principles as a core-specific course at TAMU-CC suggested that such a course had addressed well all six intellectual skills that were important for the state core curriculum. In addition, students at TAMU-CC perceived that Macroeconomics Principles had helped them develop perspectives on urbanization, societal changes, political changes, economic changes, and interconnection of urbanization, society, economics, and the natural environment. They also indicated that the Macroeconomics Principles course had helped them to develop learning communities that would be helpful in the remainder of their university experience.

ECONOMICS AS A CORE COURSE

Macroeconomics Principles became a course in the University Core of Texas A&M University-Corpus Christi (TAMU-CC) when the University changed from a two-year, upper-level institution to a four-year comprehensive university in Fall l994. Expansion of the University provided a feasible opportunity to make distinctive curriculum changes that would set the University apart from those with traditional programs. One of the most convincing arguments to the Faculty Core Curriculum Committee for inclusion of Macroeconomics Principles as a core-specific course was that it could enhance all fundamental intellectual skills such as reading, writing, mathematics, speaking, listening, and critical thinking, a goal they had set for the core curriculum as a whole. The second convincing argument to the committee was that Macroeconomics Principles could depart successfully from traditional pedagogy of lecturing and instead create a classroom environment for active learners (TAMU-CC Core Course Selection, 1993).

Macroeconomics Principles, as a core-specific course, was changed dramatically. First of all, it was taught by experienced professors who were interested in serving student needs rather than by less experienced faculty or graduate students, as is often the case for teaching a general education course in larger universities. Second, the number of students per class was limited to no more than 60 so that classroom environment could be conducive to interactive learning. Third, in an attempt to motivate young students, the teaching style emphasized linking course content to the students' world. Finally, intellectual skills development was stressed early in the course and applied to learning economic principles. As a result of these changes the classroom was much more interactive.

The following is a sample list of activities and strategies used in teaching the Core economics course, with skills that each emphasized in parenthesis. Each activity broadened students' perspectives:

Connecting students to economics by first looking at the local economy and then linking to the national and world economy. (reading, writing, listening, mathematical)

Increasing economic knowledge as well as written and oral skills by selecting for group discussion and reports controversial topics such as welfare reform, increasing minimum wage, farm

subsidies, trade policies with Japan and China, and so forth. (reading, writing, speaking, listening, critical thinking)

Developing interactive skills by assigning students to teams to research controversial topics and local business decisions (e.g.), competing teams in class analyzed possible cost-benefits of a decision made by a large South Texas food chain to develop a convenience store with fuel pumps on a corner of its parking lot). (speaking, listening, mathematical, critical thinking)

Having students locate the census tract of their residence and interview a business in the same census track to familiarize students with their immediate neighborhood. (writing, speaking, listening, mathematical, critical thinking)

Using the Internet to locate government sources of information from which to write a brief report on current economic conditions. (computer literacy, reading, writing, mathematical, critical thinking)

Using marginal analysis to show the importance of time in determining future value as a way to encourage students to plan for financial independence. (mathematical, critical thinking)

Communicating continually with students through various forms of fast-feedback methods. (reading, speaking, writing, critical thinking)

Providing opportunity for extra credit through various activities such as optional credit class quizzes, writing essays on economics topics of student choosing, interviewing business owners and making oral reports to class, registering with the Placement Center, and filing resume electronically. (reading, writing, speaking, computer literacy) (McMinn, *DSI Proceedings,* 1998, 15).

EVALUATION RESULTS

Students in each section of core curriculum courses during the fall and spring semesters complete a standard course evaluation. Data from Fall 1994 through Fall 1997 has been analyzed and are shown in the following three tables. Overall mean data of each evaluation item for Overall Core courses was compared to mean data for sections of Macroeconomics Principles. The mean ranged from 5 for "strongly agree" to 1 for "strongly disagree." Table 1 shows evaluation results of intellectual skills.

TABLE 1
TEXAS A&M UNIVERSITY-CORPUS CHRISTI
CORE CURRICULUM COURSES
EVALUATION OF INTELLECTUAL SKILLS
FALL 1994 – FALL 1997

Evaluation Skill	Overall Core	Macroeconomics	Percent Difference
Reading	3.46	3.55	2.7%
Writing	3.63	3.44	-5.3%
Listening	3.73	3.92	4.9%
Speaking	3.3	3.21	-2.8%
Mathematical	2.38	3.56	49.4%
Critical Thinking	3.71	3.94	6.2%

For Overall Core courses students agreed that core courses they had taken so far had, with the exception of mathematics, significantly enhanced the six intellectual skills. Unlike the data for the Overall Core, the data representing the mean for Macroeconomics Principles sections reflected significant enhancement of all six of the intellectual skills. The weakest skill in Overall Core courses, mathematics, was one of the highest averages in the macroeconomics course.

A goal of the Faculty Core Curriculum Committee was to make core courses a relevant learning experience for students that would be related to some major concerns of modern society. It was decided that a university theme of "Toward the Urban Environment" would be appropriate for meeting this objective. In Table 2 five evaluation items addressed these core curriculum perspectives.

TABLE 2
TEXAS A&M UNIVERSITY-CORPUS CHRISTI
CORE CURRICULUM COURSES
CONNECTING URBANIZATION, SOCIETY,
ECONOMICS, AND THE ENVIRONMENT
FALL 1994 – FALL 1997

CONNECTORS	Overall Core	Macroeconomics	Percent Difference
On the environment, helped me to understand the effect of:			
Changes in society	3.51	3.75	6.8%
Political changes	3.41	3.87	13.4%
Economic changes	3.38	4.41	30.5%
Helped me connect urbanization, society, economics, and the environment	3.39	4.00	18.1%
Helped me understand the process of urbanization	3.30	3.46	4.80%

Overall, students agreed that Core courses helped them to understand the process of urbanization and the effect changes in society had on the environment. In the evaluation of Macroeconomics Principles, each mean for Macroeconomics was higher than for the Overall Core courses and highest in evaluation items relating to economic impact.

Core course evaluations included four relevant questions relating to the way students perceived the development of learning communities. Evaluation results are summarized in Table 3.

TABLE 3
TEXAS A&M UNIVERSITY-CORPUS CHRISTI
CORE CURRICULUM COURSES
DEVELOPMENT OF LEARNING COMMUNITIES
FALL 1994 – FALL 1997

Connection to:	Overall Core	Macroeconomics	Percent Difference
Understand other courses	3.49	3.60	3.1%
Experiences helpful in rest of Core	3.65	3.85	5.6%
Experiences useful in rest of college	3.72	3.99	7.3%
Enhanced my ability to work in groups	3.55	3.47	-2.4%

Data showed that students perceived Overall Core courses would help them in other courses they expected to take in the Core and throughout their university experience. They perceived, as well, that macroeconomics would provide a valuable learning experience. It was hoped that these positive experiences would connect the student closer to the university. This goal seems to have been confirmed by the fact that TAMU-CC has a high retention rate of its freshmen. The latest retention data available from THECB reports that TAMU-CC ranks 13th of 35 Texas universities. However, when only the Master Degree granting institutions are considered, TAMU-CC ranks fifth and second among the border institutions, located in South Texas. (THECB Retention, 1998).

To summarize, data in Tables 1-3 suggested that Macroeconomic Principles had made a positive contribution to the University Core Curriculum. Without the macroeconomics course, evaluation results of the Overall Core curriculum would not have been nearly as positive.

Other semester surveys were taken to determine how students regarded economics. Both Macroeconomics and Microeconomics Principles students were asked two questions in these semester surveys that were first asked by Saunders (Saunders, 1980, 1-13): "How important do you think a general understanding of economics is in today's world?" and "Do you feel that all students should be required to take an economics course in college?" Responses to these two questions for 1997 and 1998 are presented in Table 4. Responses for earlier years are similar. (McMinn, *SAM Special Reports*, 1998, No. 1., 2.)

TABLE 4
TEXAS A&M UNIVERSITY-CORPUS CHRISTI
IMPORTANCE OF ECONOMICS AS A
REQUIRED COURSE FOR ALL STUDENTS

	1997		1998	
	Macro	Micro	Macro	Micro
"How important do you think a general understanding of economics is in today's world?"				
• **Very important or important**	**76%**	**87%**	**78%**	**85%**
• **Fairly important**	**21%**	**11%**	**18%**	**14%**
• **Unimportant or very unimportant**	**4%**	**2%**	**5%**	**1%**
"Do you feel that all students should be required to take an economics course in college?"				
• **Strongly agree or agree**	**81%**	**85%**	**74%**	**89%**
• **Undecided**	**12%**	**11%**	**13%**	**6%**
• **Disagree or strongly disagree**	**6%**	**3%**	**13%**	**4%**

It is obvious from the responses reported in Table 4 that university students who have taken at least one course in economics considered the course important and that all university students should be required to take it. The same response came from Microeconomics Principles students who were taking at least their second course in economics. They still continued to consider economics an important course should be required of all students.

CONCLUSIONS

Several conclusions can be drawn from having experienced Macroeconomics Principles as a Core course at Texas A&M University-Corpus Christi:

- Macroeconomics Principles can be taught in a way that develops and enhances all intellectual skills and strengthens students' perceptions of self and world.
- Students at TAMU-CC perceived macroeconomics to be valuable as a Core course.
- TAMU-CC students perceived macroeconomics to be an important course that should be required of all university students.
- Macroeconomics Principles meets all the objectives and guidelines set by the Texas Higher Education Coordinating Board.
- The Texas Higher Education Coordinating Board Core Curriculum would have been strengthened if a course in economics principles had been required.

REFERENCES

Freshman to Sophomore Retention (Fall 1996 to Fall 1997) by sex and ethnicity Report on Academic Performance of Texas Public Universities, Texas Higher Education Coordinating, Board, December 1998.

McMinn, Robert D., The Importance of Economics as a Required Course for all University Students, ***Society for Advancement of Management, SAM Special Reports, 1998, No.1.***

McMinn, Robert D., A Case for Economics in the University Core, ***1998 Decision Sciences Institute Southwest Region Theory and Applications Proceedings,*** pp. 13-15

Nzeogwu, O. and McMinn, R., (1996). Teaching Introductory Macroeconomics as a Core Curriculum Course. *Theory and Application Proceedings,* Decision Sciences Institute Southwest Region. 64-66.

Saunders, P. (1980). The Lasting Effects of Introductory Economics Courses. *The Journal of Economic Education,* 12 (1): 1-13.

TAMU-Corpus Christi University Core Program Course Selection Report. (1993 Summer). Unpublished.

Texas Higher Education Coordinating Board Rules: Chapter 5, Subchapter S, 1999 (**http://www.thecb.state.tx.us/rules/5/5_S.htm**)

Working Document Report of the Advisory Committee on Core Curriculum, Texas Higher Education Coordinating Board, 1998.

PERCEIVED BARRIERS OF HUD HEADS OF HOUSEHOLD TO HOME OWNERSHIP, WITH IMPLICATIONS FOR FEDERAL HOUSING AND EMPLOYMENT POLICY

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ABSTRACT

Survey data were gathered from a sample of 102 public housing residents who resided in the Pine Chapel section of the City of Hampton, Virginia and attended a community meeting conducted by the Hampton City Redevelopment and Housing Authority. The topic of the meeting concerned the proposal to gradually move the residents out of public housing and disperse them into sites throughout the City of Hampton throughout the next five years due to a planned highway construction project that would requires the use of the land. Fifty-four percent of the residents who were presented with a survey actually responded. Survey respondents were predominately African-American, single female heads of households. According to survey results, the respondents felt that lack of savings for a down payment was the strongest barrier to being able to purchase a home, followed by lack of income for a house payment, lack of credit, being a single parent, and lack of knowledge of the home buying process. Statistical significance testing was conducted on perceived barriers to home ownership. The perception factors were analyzed by examining results for the entire sample, followed by a breakdown by age and number of dependents. Additional analyses were conducted to determine if the respondents'employment status (employed verses unemployed) had an association with perceived barriers to home ownership. The study concludes with recommendations for housing policy, employment policy and for future research.

INTRODUCTION

Home ownership can be considered an American dream. In addition to serving as shelter, owner-occupied housing is a representation of the amount of wealth and success that the household has accumulated, provides a measure of the household's status in the community, exemplifies middle class values, and can lead to greater opportunities (Koebel & Zappettini, 1993, p. 36). According to the U.S. Department of Housing and Urban Development's (HUD's) Urban Policy Brief No. 2: Home ownership and its Benefits (1995), a preponderance of evidence confirms that many of the benefits commonly associated with Home ownership are valid, including assertions that it 1) increases personal wealth; 2) enhances personal well-being; 3) creates stronger neighborhoods; and 4) promotes economic growth.

Unfortunately, the possibility of owning a home is slipping away from many Americans. This can be at least partially attributed to higher housing costs. Using data from several sources, including the Current Population Survey and the American Housing Survey, Koebel et al. (1993) determined that with the exception of those aged 65 or above, the Home ownership rate had decreased between 1974 and 1989.

This study focused on perceived barriers to home ownership among public housing residents, most of whom were female heads of household. Information gleaned from the study will be used to recommend ways to help alleviate barriers to, and facilitate home ownership among the study population.

The purpose of the study was to determine perceived barriers to home ownership and strength of these barriers among public housing residents of the Pine Chapel section of the City of Hampton. Pine Chapel operates under the Hampton Redevelopment and Housing Authority, which is partially funded by the U.S. Department of Housing and Urban Development (HUD). The target population for the study consisted of Pine Chapel public housing residents who attended monthly meetings in their neighborhood community center. The residents were requested to complete survey questionnaires.

One of the major objectives of the study was to develop a list of perceived barriers to home ownership among the target population under study. A second objective was to develop a list of rankings on perceived barriers to purchasing a home and secondly, to determine whether age and number of dependents of the heads of household influenced the perception of barriers to home ownership. A third objective was to determine if the time horizon for plans to purchase a home varied according to age of the heads of household. A final objective was to perform additional analyses upon the data, contingent upon the results of the study.

LITERATURE REVIEW

This section of the report will focus on literature pertaining to characteristics of HUD assisted renters, particularly those in public housing projects. It will also cover research on their aspirations and reasons for purchasing a home.

Throughout this paper, the focus will be on the "householder," or more specifically, the person or people in whose name the public housing is held (Casey, 1992). According to research conducted by Casey (1992) on characteristics of HUD Assisted Renters, African Americans are served at a higher rate in HUD assisted housing than their share of eligible applicants, whereas white householders are served at a lower rate. The researcher reported that the greatest proportion of public housing householders are in the 35 to 64 age group, with age 56 being the median. In addition, 56 percent of these householders did not complete high school. Marriage appears to have an influence on entry into public housing under HUD in that those who are married are less likely to be served. In 1989, only 13 percent of assistant assisted households under HUD consisted of married couples. There is a tendency for these households to be headed by women (72 percent), in comparison to their proportion in the income eligible population (61 percent). Forty-two percent of these households had at least three or more children. Their median household income was $6,571.00, and their primary source of income or welfare was Food Stamps (49%), followed by Social Security Income or Pensions (47%) and Welfare/Social Security Income (45%).

According to results presented by Rohe and Stegman (1990) of a three year program evaluation effort using household survey data from the Public Housing Homeownership Demonstration Project under HUD, "home buyers were much more likely to have higher incomes ($16,673 p. xi vs. $6,539), to be two-parent households (47 vs. 24 percent) and to have at least one full-time wage earner in the household (91 verses 24 percent) than the average public housing resident."

The desire to purchase a home had been associated with the American Dream (Koebel & Zapettini, 1993). Koebel et al. asserts that not only does homeownership serve as a symbol of a families' wealth, it represents success and status in the community. They note that as the age of a householder increases, so does their demand for owning a home. Heskin (1983) determined from a survey of tenants from Los Angeles County that two thirds of them planned to purchase a home in the future.

A portion of a three year endeavor to evaluate a Public Housing Demonstration Program under HUD yielded the following three most commonly cited reasons for wanting to purchase a home (Rohe & Stegman, 1990): 1) to have a strong investment; 2) to be able to pass something down to the children; and 3) to be able to own something.

METHODOLOGY

A survey instrument was developed for collection of data on barriers to home ownership among the study population, and on their socio-demographic and socio-economic characteristics. The survey was constructed by asking least sensitive questions up front, followed by more sensitive questions to enhance the response rate. The survey was pretested on several former residents of public housing and on several undergraduate students who were assisting with the study to identify any problems with the survey items. A sample of the survey can be viewed in the Appendix.

The target population for this study consisted of all Pine Chapel Public Housing Residents who were primary heads of household and attended a community meeting at the neighborhood community center presided over by the Hampton Redevelopment and Housing Authority. The study population consisted of all 53 residents who actually completed the survey and returned in to one of the two survey administrators.

Survey data were collected using a sample of 102 low-income public housing residents of the Pine Chapel section of Hampton, Virginia. The survey was administered by a faculty research fellow and her student research assistant in the Pine Chapel Community Center. The Hampton Redevelopment and Housing Authority was working on plans and disseminating relevant information to the residents as this project was being carried out to inform them of the plans for gradually relocating each of the families in Pine Chapel over the next five years due to the construction of a highway through the neighborhood. There were 53 heads of household who completed the survey, which was a 54 percent rate of response.

DATA ANALYSIS

This section of the report provides a description of variables and their coding and describes the statistical analysis procedure used to analyze the survey data. Variables were chosen for the study

based upon an extensive exploration of the literature on both public housing and the hard-to-serve population under the Job Training Partnership Act (Barnow & Constantine, 1988; Castle, 1990; Friedlander & Long, 1987; Levitan & Gallo, 1988; Orfield & Slessarev, 1986; and Sandell & Rupp, 1988).

All of the socio-demographic data, socio-economic data, and data on perceived barriers to purchasing a home were dichotomous, so dummy variable coding was used. This data were on a nominal scale. The section below provides a description of the socio-demographic and socio-economic variables and the variables on perceived barriers to purchasing a home, and how they were coded. Please note that a few variables in the survey itself were dropped from analysis because of lack of response. The variables used in the study and their respective coding can be viewed the Appendix.

The socio-demographic and socio-economic data were analyzed through the use of descriptive statistics. Frequencies and percentages are reported for these variables. Perceived barriers to home ownership were analyzed through a test of means, which enabled items to be rank ordered. Number of responses, rank, mean and standard deviation are reported for each of these items. In addition, statistical significance testing was conducted on these items and percentage responding affirmatively to each item is reported. Furthermore those items that were responded to affirmatively by more than 10 percent of the study population are identified and are noted as being statistically significant at the .05 level. Further analyses were conducted through use of the Chi-Square Test of Significance to determine if the difference in perception factors varied by age, and number of dependents. In addition, Chi-Square Analyses were conducted to determine if age and lack of credit made a difference in plans to purchase a home within a designated time frame.

RESULTS

This section of the report provide results for statistical analysis of the survey data. The section is divided into a number of segments, including the following: A breakdown of the study population by selected characteristics, which include 1) socio-demographic and socio-economic data; 2) planned actions to purchase a home in the future; 3) sources of household income received by survey respondents; 4) perceived barriers to home ownership; and 5) additional analyses performed on perception factors by age and number of dependents; and 6) analyses on plans to buy home within a designated time frame, by age and lack of credit.

The study population was broken down by selected characteristics pertaining to socio-demographic and socio-economic variables. Frequencies and percentages were obtained for each of the variables. The study population consisted of a greater proportion of single African-American female heads of household than any other designated group. Most of the respondents had between zero and three dependents residing in their household. A greater proportion of the survey respondents were unemployed in comparison to other employment categories, but when employment did exist, it was more likely to be part time than full time. Furthermore, 26.4 percent of the respondents who did answer the question pertaining to length of unemployment had been out of work for more than 24 months. Interestingly enough, over half of the survey respondents failed to answer this particular question.

The greatest proportion of the Pine Chapel residents had a high school diploma or GED in comparison to other categories for level of education. A very small proportion of them reported plans to graduate from an educational or training program. In fact, 84.8 percent of the survey respondents did not respond to the question. When surveyed concerning status as head of household, 88.7 percent of the respondents answered affirmatively, 7.5 percent said they were not the head of household, and 3.8 percent failed to answer the question.

Part of the survey administered to Pine Chapel residents addressed planned actions to purchase a home in the future. Results revealed that the greatest proportion of residents do not plan to complete an educational or training program in the future, nor do they plan to enroll in such a program. When asked about strategies that will be used to obtain a job, 15.1 percent reported plans to visit the Virginia Employment Commission and only 7.5 percent of them reported intentions of reading the classified ads. In addition, just 15.1 percent of them indicated that they planned to use other means for job search in addition to the specific actions mentioned above.

The Pine Chapel residents were questioned concerning their sources of household income. In comparison to all of the income variables, the major sources of household income were from employment and welfare grants, with 28.3 percent of the respondents receiving income from these respective areas. The next highest percentage was for receipt of Social Security Income, with 22.6 percent of the respondents acknowledging income from this source. Only 1.9 percent of the respondents received alimony and just 15.1 percent of them receive child support. Employment of one or more children was a source of income for only 3.8 percent of the respondents, and employment of spouse provided a source of income for 7.5 percent of them. None of the survey respondents acknowledged receiving income from unemployment compensation benefits. Only 11.3 percent of them reported having other sources of income such as baby-sitting for other parents.

Pine Chapel residents were surveyed on their perceptions of what prevents people from purchasing a home, based on the 24 barriers to home ownership that were obtained from the literature and from banking staff who have responsibility for qualifying individuals for purchasing a home. The initial plan for this segment of the study was for the survey respondents to place a check beside each barrier and then indicate if it that barrier had ever applied to them. However, the respondents did not attribute some of the more sensitive barriers to themselves, such as substance abuse, being a battered woman or man, or bad attitude. The researchers determined that the study would focus on the perceived barriers rather than those the residents attributed to themselves.

Table 1 illustrates the results for perceived barriers to home ownership. A test of the means was conducted for the barriers which enabled the researchers to rank order the data in decreasing order of strength. For each barrier, 1 represented an affirmative response for the barrier and 2 represented a negative response. Results revealed that the strongest perceived barrier to home ownership was lack of savings for a down payment, followed by lack of income for a house payment. The next strongest barrier was lack of good credit, followed by being a single parent and little or no work experience. Lack of knowledge on the home buying process was ranked in sixth place, followed by lack of job skills. Lack of life insurance was ranked last in terms of being a barrier to employment, even though life insurance is one of the areas emphasized by the banks.

Further analysis of the perceived barriers to home ownership based on age were conducted through use of the Chi-Square Test of Significance. Only those barriers that were statistically significant are reported here (See Table 2). Those residents who perceived lack of credit to be a

barrier were more likely to be 48 years of age and above. Similarly, older individuals, age 34 and above, were more likely to feel that lack of knowledge of the home buying process and lack of savings were barriers to purchasing a home.

A Chi-Square Test of Significance was conducted to determine if number of dependents would have an influence on perceived barriers to home ownership (See Table3). Findings indicated that those who had dependents between the ages of 1 and 3 were more likely to feel that being a single parent was a barrier to home ownership than those with no dependents or more than four dependents.

A Chi-Square Test of Significance was conducted to determine if age was associated with the time span for perceived time in which one would be able to purchase a home. Findings revealed that younger residents had a perception of a longer time horizon to become home owners in comparison to older residents. This finding was statistically significant at the .05 level.

A Chi-Square Test of Significance was conducted to determine if plans to purchase a home would vary when contrasted with perception of lack of credit. Results revealed that those Pine Chapel residents who want to purchase a home were statistically more likely to see lack of credit as a barrier in comparison to those who do not plan to purchase a home. This finding was statistically significant at the .01 level.

Table 1
PERCEIVED BARRIERS TO HOME OWNERSHIP

	N	Rank	Mean	Std Dev.	%	Sign Note 1
Lack of savings for a down payment	53	1	1.358	0.484	64%	*
Lack of income for a house payment	53	2	1.377	0.489	62%	*
Lack of good credit	53	3	1.415	0.497	59%	*
Single parent	53	4	1.491	0.505	51%	*
Little or no work experience	53	5	1.528	0.504	47%	*
Lack of knowledge on how to buy a home	53	6	1.679	0.471	32%	*
Not enough time in same line of work	53	7	1.717	0.455	28%	*
Lack of job skills	53	8	1.736	0.445	26%	*
Substance abuse	53	9	1.755	0.434	25%	*
Lack of transportation	53	10	1.792	0.409	21%	*
Poor educational training	53	11	1.811	0.395	19%	*
Ex-offender status	53	11	1.811	0.395	19%	*
Handicap	53	12	1.868	0.342		
Long-term welfare recipient	53	12	1.868	0.342		
Poor vocational training	53	12	1.868	0.342		
Dishonorable discharge	53	13	1.887	0.320		
Poor appearance	53	13	1.887	0.320		

Bad attitude		53	13	1.887	0.320
Having more than 3 children		53	13	1.887	0.320
Lack of day care		53	14	1.906	0.295
Lack of medical insurance		53	15	1.925	0.267
Lack of a telephone		53	16	1.962	0.192
Being a battered woman or man		53	16	1.962	0.192
Lack of life insurance	53	17	2.000	0.000	

Note 1: Statistically significant at the .05 level by more than 10% of the respondents

Table 2
Perceived Barriers to Home Ownership by Age of Respondent

Barrier	Sign
Perception of lack of credit	.01
Perception of lack of knowledge of the home buying process	.05
Perception of lack of savings	.05

Table 3
Perception of Being a Single Parent as A Barrier by Number of Dependents

Barrier	Sign
Single parenthood	.01

DISCUSSION OF RESULTS AND THEIR IMPLICATIONS

This section of the report provides a discussion of the results of the statistical analysis of the data, and associated implications of these results. It addresses the breakdown of the study population, actions they planned to take to purchase a home in the future, their sources of household income, and their perceived barriers to home ownership. Further discussion is provided based on additional analyses of the barriers to home ownership.

Many of the socio-demographic and socio-economic characteristics of the study population were similar to those identified by the Department of Labor (DOL) Task Force as being Hard-to-Serve under JTPA (Barnow and Constantine, 1988). The DOL Task Force divided the characteristics into three categories: deficiencies, such as lack of work skills; barriers, such as lack of transportation

and no telephone; and target groups, such as ex-offenders, minorities and having more than 3 children. The socio-demographic and socio-economic characteristics of the Pine Chapel residents who responded to the survey suggest that these individuals may have a harder time being able to purchase a home than other individuals and special assistance may be needed, such as skills training, educational assistance, goal setting skills, job seeking skills and job placement. Many of these survey respondents have been out of work for quite some time, and according to the literature, the longer one is unemployed the less likely they are to obtain employment.

Most of the survey respondents indicated that they did not plan to complete an educational or training program in the future and they did not plan to enroll in one. However, lack of skills was ranked eighth in terms of perceived barriers to home ownership., There is a positive correlation between level of education and income, as well as job skills and income. Assuming that the individuals attributed the barriers that they selected to themselves, such as lack of job skills, prospects for these individuals to be able to purchase their own home one day appear bleak unless an intensive effort is provided to assist them throughout the process of gaining additional education or job skills and becoming employed. Furthermore, most of them said that they did not plan to read the classified ads to search for a job. This may be due to lack of money for a daily newspaper.

The major sources of income for the Pine Chapel residents were their own employment and welfare grants, followed by Social Security Income. Over one-half of these individuals are unemployed and only 15.1 percent of them are employed full time. Results suggest that major changes in income and employment status are needed if these individuals are to be able to purchase a home one day and become self-sufficient. Some of the residents may have physical and mental challenges that limit their ability to obtain education or training and enter employment. However, having a handicap was not statistically significant in terms of perceived barriers to home ownership.

Not surprising was the fact that lack of savings for a down payment was ranked as first for barriers to home ownership, followed by lack of income for a house payment and lack of good credit. Single parent was ranked as fourth, which complicates the income problem when child support is not provided. These findings correspond to those of Rohe and Stegman (1990), who determined that "home buyers were much more likely to have higher incomes ($16,673 p.xi vs. $6,539), to be two-parent households (47 vs. 24 percent) and to have at least one full-time wage earner in the household (91 vs. 24 percent) than the average public housing resident."

These researchers have reason to believe that in many cases, the Pine Chapel residents attributed the barriers to home ownership that they selected to themselves. Even though respondents were not inclined to identify barriers such as substance abuse and ex-offender status as barriers for themselves, it is very possible that these barriers may have applied to some of the residents. These particular barriers were found to be statistically significant, yet they are things that would prevent the residents from being able to reside in the Pine Chapel Public Housing Project. The researchers overheard some of the residents discussing the perceived barrier section of the survey and debating whether or not they should be honest with their responses. Additional research is needed on perceived barriers to home ownership but trust and confidentiality of the residents is paramount to getting accurate data.

The perception of lack of credit, lack of knowledge of the home buying process and lack of savings were statistically significant barriers to home ownership, based on age. The finding that older individuals were more likely to perceive these items as barriers may be due to the fact that they are

facing reality concerning ability to purchase a home. In contrast, younger individuals may have hopes and perceived prospects of a better future.

Results indicated that those who had dependents below the ages of 1 and 3 were more likely to feel that being a single parent was a barrier to home ownership. The individuals who have small children are less likely to be employed than those with older children, or those with older children who can serve as baby-sitters for smaller children.

Younger residents had a perception of a longer time frame for purchasing a home. Further research is needed to determine the reason for this finding. It could be attributed to having small children, lack of savings, or additional barriers such as lack of credit.

Results indicated that lack of credit was much more likely to be perceived as a barrier to purchasing a home for those who planned to buy a home than those who did not. It is possible that those individuals who wanted to purchase a home and who perceived lack of credit as a barrier have made one or more attempts in the past to purchase a home. This finding also seems to lend support to the notion that the residents were likely to attribute perceived barriers to purchasing a home to themselves.

CONCLUSIONS AND RECOMMENDATIONS

1. Socio-demographic and socio-economic characteristics of the Pine Chapel residents who were surveyed are similar to similar to those of the hard-to-serve population under JTPA.

2. An intensive effort must be made to provide these individuals with assistance that includes skills training, educational assistance, goal setting skills, job seeking skills and job placement if they are to have an opportunity to purchase their own home in the future.

3. It is suggested that a federal program be designed for public housing residents to assist them in saving money for a down-payment to purchase a home.

4. Further research is needed to explore perceived barriers to home ownership for public housing residents. Many of the individuals were reluctant to attribute any of the barriers to themselves, particularly for substance abuse and domestic violence.

5. Suggest that local organizations contribute assistance to public housing residents because they appear to need involvement with the community for networking purposes which is an important means to employment. The residents reside in a sheltered environment and need exposure to modes that can be used to seek employment. Most of the residents had no plans for seeking employment, even though over half of them were not employed.

6. It is strongly recommended that a goal setting plan for home ownership (or self sufficiency rentals) be established with each of the heads of household who indicated an aspiration to purchasing a home one day.

REFERENCES

Barnow, B.S., & Constantine, J. (1988). Using performance management to encourage services to hard to serve individuals in JTPA. (Research Report Series, National Commission for Employment Policy). Washington, D.C.: ICF Incorporated.

Casey, C.H. (1992). Characteristics of HUD-Assisted Renters and Their Units in 1989. Washington, D.C.: U.S. Department of Housing ad Urban Development, Office of Policy Development and Research.

Castle, N.K. (1990). The Job Training Partnership Act: Policy and program directions. Initial implementation outcomes based on the "Quick Turnaround" data segment of the Job Training Longitudinal Survey, October 1983 through June 1986. Dissertation Abstracts International.

Friedlander, D, & Long, D. (1987). A study of performance measures and subgroup impacts in three welfare employment programs. New York: Manpower Demonstration Research Corporation.

Heskin, A.D. (1983). Tenants and the American Dream: Ideology and the Tenant Movement. New York: Praeger.

Koebel, C. T. & Zappettini (1993). Housing tenure and affordability from 1970- to 1990: Progress, stasis, or retreat? Housing and Society, 20 (3), 35-46.

Levitan, S.A. & Gallo, F. (1988). A second chance: Training for jobs. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Orfield, G., and Slessarev, H. (1986). Job training under the new federalism: JTPA in the industrial heartland. Chicago, IL: University of Chicago.

Rohe, W. M. & Stegmanm M.A. (1990). Public Housing Homeownership Demonstration Assessment. Prepared for U.S. Department of Housing and Development, Office of Policy Development and Research.

Sandell, S. H., and Rupp, K. (1988). Who is served in JTPA programs: Patterns of participation and intergroup equity. (Research Report Series: RR-83-11). Washington, D.C.: National Commission for Employment Policy.

U.S. Department of Housing and Urban Development (1995). Urban Policy Brief No. 2: Homeownership and its Benefits (Accn. 6775). Washington D.C.: Office of Policy Development and Research.

Appendix
Coding of Variables

	socio-demographic variables			
1.	Gender	0 = Female	1 = Male	
2.	Primary Language-	1= English	2 = Spanish	
3.	Racial Background-	1 = African-American	4 = Asian	
		2 = Caucasian	5 = Other	
		3 = Hispanic		
4.	Head of Household-	1 = Yes		
5.	Marital Status-	1 = Single	2 = Separated	
6.	Number of Dependents Residing in Household-		1 = None	5 = Four
			2 = One	6 = Five
			3 = Two	7 = Six
			4 = Three	8 = More than 6
7.	Age Category-	1 = Less than 17	4 = 35-47	

2 = 18-21 5 = 48-60
3 = 22-34 6 = 61-65

Socio-economic variables

1. Employment Status- 1 = Full time 2 = Part time 3 = Unemployed
2. Length of Time Unemployed (for those who are unemployed)-
   1 = 6 months 4 = 19-24
   2 = 7-12 months 5 = more than 24 months
   3 = 13-18 months
3. Length of Time to Complete Educational or Training program (if a student)
   1 = 1-6 months 4 = 19-2 months
   2 = 7-12 months 5 = 19-24 months
   3 = 13-18 months 6 = more than 24 months
4. Highest Level of Education Completed
   1 = Elementary School 4 = 2 Year college
   2 = Junior high/middle school 5 = 4 Year College
   3 = High school/GED 6 = Higher level than a 4 year college
5. Plans to Purchase Own Home 1 = Yes 2 = No
6. Perception of ability to purchase a home within the following span of time:
   1 = 0-2 years 4 = 9-10 years
   2 = 3-5 years 5 = More than 10 years
   3 = 6-8 years
7. Actions planned to be able to purchase home in future (1= yes and 2 = no):
   _____ Complete an educational or training program
   _____ Read the job section of the classified ads
   _____ Other (please identify)
   _____ Enroll in an educational or training program
   _____ Go to the Virginia Employment Commission for job search
8. Sources of household income (1 = yes and 2 = no)
   _____ Alimony
   _____ Child support
   _____ Own employment
   _____ Employment of one or more children
   _____ Employment of spouse
   _____ Employment of other individual residing in household other than spouse or child
   _____ Social security income
   _____ Unemployment comp.
   _____ Welfare grant
   _____ Other (please identify)

Variables on perceived barriers

Variables on perceived barriers were coded with 1 representing yes, the variable is a barrier; and 2 representing no, the variable is not a barrier. The following barriers to being able to purchase a home were analyzed:

Single Parent
Handicap (physical/mental/emotional)
Ex-offender status
Dishonorable discharge from the military
Substance abuse (drugs or alcohol)
Long-term welfare recipient
Having more than 3 children
Being a battered woman or man
Little or no work experience
Lack of income for a house payment
Lack of knowledge on the home buying process
Not enough time in same line of employment
Lack of a telephone
Lack of day care
Lack of good credit
Poor educational training
Poor vocational training
Bad attitude
Lack of transportation
Lack of medical insurance
Poor appearance
Lack of life insurance
Lack of savings for a down payment

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