TEACHING ECONOMIC PRINCIPLES THROUGH LITERACY METHODS

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ABSTRACT

In a nation of economic uncertainty, productive workers, responsible citizens, knowledgeable consumers, prudent savers and investors, effective participants in the global economy, and competent decision makers need to come forth. A National Test of Economic Literacy (Brenner, 1999) revealed "an appalling lack of knowledge among adults and teens" in the United States. Forty-nine percent of adults and 66% of high school students failed the test (Brenner, 1999, 5)! "While 96% of Americans think economics should be taught in the schools, only 13 states require students to take an economics course to graduate, and only two require them to take a course in personal finance" (Brenner, 1999, 5) .

Literacy (reading and writing) is a core subject in schools; economics has not been recognized as a standard component of the school curriculum. Both subjects are critical to the success and well being of children and adults. By introducing economics through literacy methods, this "two at a time curriculum" can help students become acquainted with economic vocabulary and concepts, and at the same time learn how to read and write. Ultimately, if the economic concepts learned through this method of partnering economics and literacy are transferred to daily classroom language and situations, students will be able to generalize and apply them to other areas of their life!

Children need to be taught economic principles kindergarten through twelfth grade. This can happen without additional teaching time or resources by teaching economics and literacy simultaneously. Economic education can be integrated into a crowded curriculum using literacy methods. This paper

will consider the implications of "two at a time curriculum" featuring economics as the content and literacy as the process.

INTRODUCTION

Webster defines the word literate as "*knowing letters, able to read and write*" (Teal, 1984, 181). Recent studies reveal that the above definition of literacy is very basic and that literacy is so much more. Research indicates that teaching reading and writing skills in isolation is difficult for children because there is no meaning involved. Integration of literacy skills with content area subjects help learning become relevant to the student. Literacy is a process that must have a content area. Herr (1964) states, "[*t]eaching phonics by elaborate isolated drills cannot be justified. The work must be meaningful and function with the reading lesson*" (p. 16). This important concept is now used in classrooms so that learning can be more effective. It is important to understand

> *"that subject area instruction must guide children's reading and writing in order to produce the kind of literacy interactions and transactions that yield rich, full learning opportunities. Such instruction not only assists children in learning the content itself, but teaches them how to become increasingly independent, fluent readers and writers in subject areas"*
>
> (Ruddell & Ruddell, 1995, 433).

A content area that is often overlooked is economics. Children's knowledge in economics can increase while learning to read and write. Classroom teachers can integrate the content area of economics into the regular classroom by daily introducing economic concepts through children's literature. With children's literature as the foundation, reading and writing skills can be used to introduce and reinforce economic literacy. Other literacy methods and economic games can be motivating to the students and provide a rich environment for learning. Economic literacy needs to be taught K-12. When students are younger, it is a prime time or "*window of opportunity*" for learning because they are so teachable and fascinated with money. They can

learn that with money comes the responsibility to make good choices and decisions. Economic literacy is important and so is literacy in reading and writing. Economics is the content and literacy is the process. Teamed together, these two subject areas can maximize the processes of teaching and learning, thereby increasing productivity. Ultimately, children can have benefits in both literacy and content area.

Economic education has long been ignored in the United States. People are going through life acquiring economic literacy in a "*hit and miss*" fashion. Literacy (reading and writing) is a core subject. It is supported by schools, communities and individuals, because it is essential for a successful and fulfilling life. Economic literacy needs to be integrated into the schools through literacy programs. It is imperative that our country looks to the future and supports economic literacy.

Literacy is an issue evoking strong feelings in both economic educators and elementary teachers. Economic educators have long argued that children of all ages deserve the opportunity to become economically literate. Elementary classroom teachers have argued for literacy, too; that is, reading and writing. Traditionally, the case for literacy in reading and writing has taken precedence in the curriculum, thus explaining why a large percentage of the elementary school day has always been devoted to language arts instruction. Although everyone might agree that economic literacy is desirable, teachers say there simply isn't enough time in the school day to teach economics without giving up time elsewhere. Ironically, this problem of how we use our limited time to satisfy our many wants is an economic problem. It is the essence of the discipline of economics. Addressing it requires an economic understanding of efficiency and productivity: increasing output with given inputs (Flowers, Meszaros & Suiter, 1994, ii).

By integrating economics and children's literature with literacy methods, both disciplines (economics and literacy) will be benefitted and children's lives will be enhanced. Demographic trends indicate that our country's economic situation is becoming more and more uncertain. This is creating an awareness of the importance of economic education. Support in the form of economic standards, legislation, and educational programming

is emerging. The National Council on Economic Education (NCEE) develops curriculum, conducts research, and is committed to training teachers who are willing to take advantage of this opportunity. Incorporating economics into the curriculum can happen. One way is to integrate it with literacy. Reading and writing are natural ways to take economic principles and adopt them into daily life. Economics is a content area that has its own vocabulary or jargon. If the vocabulary is not known, then the content of economics cannot be known. There are economic principles integrated throughout children's literature. Economics can be introduced and rooted in students' minds in this way.

The lack of economic literacy among teachers K-12 is one of the most significant limitations hindering it from becoming a part of school curriculum. Teachers are not sure how to teach economics, so they don't teach it. The "*economic way of thinking*" is about a logical, systematic way of making decisions. This way of thinking can empower children and adults in daily life.

Teachers often have limited support for teaching economic literacy from their administration. Even though it is included as one of the nine core subjects in Goals: 2000 (Ohanian, 2000, 348), economics continues to be absent in a large percentage of school curricula's.

Another significant problem with teaching this subject is that teachers feel there is no time. They are overwhelmed with the amount of curriculum that is required by district, state, and federal mandates. However, if economics is integrated with reading and writing through literacy methods, it can become a reality in schools without requiring extra teaching time or resources.

The goal of integrating the content of economic literacy into classrooms through the process of literacy can exist. Classroom teachers are very competent in language arts, because they have been trained extensively in this discipline; economic literacy is now the challenge.

REVIEW OF LITERATURE

Economics and Economic Education

In 1930, John Maynard Keynes described economics as a theory that "'*does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine, an apparatus of the mind, a technique of thinking, which helps its possessor to draw correct conclusions*'" (Buckles, 1991, 24). "*At the most fundamental, and perhaps most important level, the economic way of thinking is best exemplified by the adage: 'There is no such thing as a free lunch'*" (Buckles, 1991, 24, 25). "*It is important to realize that economics relies on fundamental principles that are necessary to discover the consequences of alternative courses of action, which in turn enable individuals to implement their value judgments more intelligently*" (Schur, 1985, 21). Many citizens of the United States do not have a clue how to define or apply economics. To the average person, economics appears as an abstract, mystical phenomenon that is 'out there somewhere.' Yet, every society on earth must deal with economics, because economic literacy is life. The basic economic problem: The existence of scarcity creates the basic economic problem faced by every society, rich or poor: how to make the best use of limited productive resources to satisfy human wants. To solve this basic problem every society must answer these three basic questions: 1) What goods and services will be produced? 2) How will goods and services be produced? 3) Who will consume the goods and services (Day & Ballard, 1996, 2-2).

Economics is complex, but it does involve all people in every walk of life. "*The economy effects everything in our lives: how we earn a living, how much we earn, the availability, cost and quality of what we buy, and how we invest for our future*" (Brenner, 1999, 4). Parade magazine (Brenner, 1999) reports the results of a National Test of Economic Literacy administered to 1,010 adults and 1,085 high school students. This study reveals an appalling lack of economic knowledge. "*Forty-nine adults scored an F while only 6% got an A. Among the high school students, 66% got an F, while only 3 % got an A*" (Brenner, 1999, 4). Brenner (1999) concludes:

"*This is not surprising, when you learn how little Americans are taught about it*" (p. 4).

A further summary of the results (Brenner, 1999) revealed that: 1) On average, adults got a grade of 57%, high school students averaged 48%; 2) Almost two-thirds did not know that in times of inflation, money does not hold its value; 3) Only 58% understood that when the demand for a product goes up, but the supply does not, that product's price is likely to increase; 4) Half of the adults, and about two-thirds of the students, did not know that the stock market brings people who want to buy stocks, together with those who want to sell them; 5) Just over one in three Americans realize that society must make choices about how to use resources; and 6) While 96% of Americans think economics should be taught in the schools, only 13 states require students to take an economics course to graduate, and only two require them to take a course in personal finance.

Prior to the 1999 study (Brenner, 1999), the last national test of economic literacy was given in 1988; Robert Duvall, President of the National Council on Economic Education, states that "*there has been no noticeable improvement*" (Brenner, 1999, 4). Where is our society lacking if economic literacy has not improved in eleven years. "*Most Americans have no formal education in basic economics or in personal finance, which is its practical application*" (Brenner, 1999, 4). "*As adults, most of us have had to acquire our understanding of economics and finance on the run*" (Brenner, 1999, 6). Duvall indicates that few American schools have taught economics because "*the subject has been seen as abstract, not applicable to daily life. Yet, paradoxically, parents and teachers alike believe that children should be taught economics. If children are not taught economics in the family setting by good role models, then where can they learn it except by trial and error*" (Brenner, 1999, 5-6)?

The National Council for Economic Education (NCEE) has been fundamental in providing support for expansion of economic education in America. It is a unique, nonprofit partnership of leaders in education, business and labor devoted to helping youngsters learn to think, to choose, and to function in a changing global economy. Founded in 1949, the NCEE is the premier source of teacher training and resources for economic

education in kindergarten through grade twelve. This network of 50 state councils, and over 260 university-based centers, is called EconomicsAmerica (National Council on Economic Education, 1999).

EconomicsAmerica is a nationwide, comprehensive program for economic education in America's schools that: 1) Leads in the development of national and state content standards in economics; 2) Assists in development of national, state and local standards-based curricula; 3) Publishes classroom-tested materials and strategies for teachers and students; 4) Provides university/college-based courses, workshops, and professional development for teachers; and 5) Conducts evaluation, assessment, and research (National Council on Economic Education, 1999).

NCEE also heads a similar program internationally. EconomicsInternational is an international program to help build economic education infrastructures in the emerging market economies that: 1) Collaborates with international colleagues to build economic education delivery systems; 2) Provides professional development for teachers and teacher trainers; 3) Translates, adapts, and develops instructional materials; 4) Advises on development of standards, curricula, and assessment tools; and 5) Supports multilateral exchange of ideas, methods, and materials (National Council on Economic Education, 1999).

"*Through this vital network we carry out our mission with vigor, integrity and demonstrated success*" (National Council on Economic Education, 1999). A national imperative reveals:

The shocking reality is that American high school and college students know precious little about how the American economic system actually works and what they need to know to work successfully in it. Fifty percent don't know what a federal deficit is. Sixty percent do not understand the purpose of profits. Seventy percent cannot identify the most widely used measure of inflation. Sixty percent think wages are set by government action. The price of economic illiteracy is more than this country can afford. Young people are unfamiliar with the basics of saving, investing, and the uses of money and credit. As adults they are more likely to have money problems, career problems and credit problems, and less likely to make informed decisions as citizens and voters (National Council on Economic Education, 1999).

The mission of the NCEE is "*to help all students develop economic ways of thinking and problem solving that they can use in their lives as consumers, savers, members of the workforce, responsible citizens, and effective participants in the global economy*", National Council on Economic Education, 1999). The decision-making process of economic literacy helps students to analytically learn how to weigh the benefits and costs to any decision. Economic literacy gives them an orderly and reasoned approach to economic decision-making. The NCEE provides the following guidelines for decision-making:

(1)	State the problem or issue. What are the important facts? What questions of the choice are raised? What is the heart of the problem?;
2)	Determine the personal or broad social goals to be attained. Assign some rough order of priority for achieving them;
3)	Consider the principal alternative means of achieving these goals. Take account of the limits on available resources and other restrictions that limit freedom of action;
4)	Select the economic concepts needed to understand the problem and use them to appraise the merits of each alternative. Which concepts are not useful in grasping the essentials of the problem? Which concepts are most useful in exploring the effect of each alternative solution?;
5)	Decide which alternative best leads to the attainment of the most goals or the most important goals. Which of the solutions seem to be most feasible? Which are the most desirable? What are the tradeoffs among the different goals; that is, how much of one goal must be given up in order to achieve more of another (Saunders, Bach, Caulderwood & Hansen, 1993, 9 & 10).

These five steps give the students an organized and orderly approach to solve their problems in school and life.

The Campaign for Economic Literacy is underway. The National Council on Economic Education announced "*an ambitious five-year, nationwide campaign to increase economic literacy among both students and adults. We, as a nation, can no longer afford to make economic literacy an option in our schools. It is critical that we give our future leaders a grasp of*

the basic principles of the American economic system so they can discern the consequences of powerful international economic changes" (National Council on Economic Education, 1999).

Economics often comes across as extremely difficult. This should surprise no one-think of what it would be like if all mathematics education were postponed until the junior or senior year in high school. Math literacy would be described as "*abysmal*," "*totally inadequate*," or "*frightening*." It is difficult to argue that mathematics learning is developmental throughout the curriculum, but that economic learning is not (Soper & Walstad, 1991, 134).

In a study that focused on teaching economic principles to children, it was found that the children learn concepts in developmental stages. "*The responses of the children were distinct, suggesting a stage like progression*" (Schug, 1991, 143). The younger children learn about concepts that are familiar to them and that are concrete. Schug (1991) found through his research that "*the importance of age in much of this research strengthens the idea that students need instruction in economics over several years*" (p. 151). He asserts that teachers should just introduce a few key economic principles and give the children a thorough background without rushing too much, too soon. They should build the principles with activities that are rich and concrete. This will allow students to assimilate the material into their daily lives. The students need to be presented with these ideas in a developmental fashion going from concrete to abstract.

Saunders, et al. (1993) outlines the following teaching rubric:

1)	*Mastery of the basic concepts of economics*. Like all other disciplines, economics has its own tools of analysis and "*language*," and students should know these well;
2)	*An appreciation of how the principal concepts of economics relate to each other*. Such an appreciation enables students to deal with the complex "*real world*" economic problems they will face as adults;
3)	*Comprehension of the structure of the economy*. This comprehension should also include a knowledge of how the various components and sectors of the economy interact;

4)	*Knowledge about major economic concerns-both public and personal*. Such knowledge and some understanding of how public and personal economic issues relate to each other provide a basis for grasping how individual action's shape and are shaped by economic forces;
5)	*Exercise of a reasoned approach to economic decisions.* Economic decisions can be reached more effectively if an objective, orderly, and reasoned approach replaces emotional, unreasoned judgments (p. 9).

Economic literacy can start as early as elementary and middle school. In 1987, Soper and Walstad (1991) conducted a study to determine the economic literacy of intermediate student's and junior high students. The Basic Economics Test (BET) was used to measure the economic understanding of intermediate elementary students. "*The BET appears to be a content-valid measure of the economic knowledge of fifth and sixth grade students*" (Soper & Walstad, 1991, 127). Also used was the Test of Economic Knowledge (TEK), which is a cognitive test instrument, designed to measure economic achievement of students at the eight and ninth grade level (Soper & Walstad, 1991). The results of this study (Walstad & Soper, 1991) revealed that elementary students can and do learn economics. Very little time is spent in directly teaching economics at this grade level because of the limited amount of instruction time. "*But students show basic understanding of a wide range of fundamental, microeconomic concepts and some knowledge of a few macroeconomic and international economic ideas*" (Soper & Walstad, 1991, 133).

These tests led the authors to recommend that substantially more economics could be learned by pre-high-school students than they are currently being taught. Teachers need to devote more time to economic instruction, primarily because of the developmental nature of economic learning. Finally, "*curriculum developers and instructional material producers (e.g., textbook publishers) ought to infuse more economics into the standard social studies curriculum because it appears to be the most likely place for economic instruction to occur*" (Soper & Walstad, 1991, 133-34).

A Nation At Risk

The Imperative for Education Reform states that a change in American schools is recommended and that social studies should focus on "*understanding the fundamentals of how our economic system works and how our political system functions*" (National Commission on Excellence in Education, 1983, 12). In March 1994, Congress passed President Bush's Goals 2000: Educate America setting competencies for the schools in America to achieve by the year 2000. Goal three states:

> *All students will leave grades 4, 8, and 12 having demonstrated competency over challenging subject matter including English, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography, and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our nation's modern economy*
>
> (Ohanian, 2000, 345 & 348).

Obviously, the government supports the fact that economic literacy needs to be taught in American schools. Ultimately, economic literacy incorporates decision-making skills---the economic way of thinking---which will "*ensure that all students learn to use their minds well*" (Ohanian, 2000, 348). The goal is to have standards in this content, with benchmarks at 4th, 8th, and 12th grades. These benchmarks are concepts and methodology that children should master by the time they leave that particular grade. By doing this, the students will be getting a consistent "*dos*e" of economics that is developmentally appropriate for their age. The economic concepts they learn at each step or grade need time to be digested, and then new concepts can be introduced at the next grade level.

The NCEE has identified 20 content standards that are essential principles of economics. Each standard is followed by a rational for its inclusion. Then benchmarks for the teaching of each of the content standards are provided, indicating recommended levels of attainment for students in grades 4, 8, and 12. Finally, samples of what students can do to enhance or

demonstrate their understanding of the benchmarks are provided (National Council on Economic Education, 1997).

On August 4, 1999, "United States Senator Daniel K. Akaka (D-Hawaii) introduced legislation to improve the education of American students. It was called "*The Excellence in Economic Education Act (S1487)*" (Akaka, 1999, 1). This bill will "*increase students' economic knowledge, strengthen teachers' ability to teach economics, encourage research to increase economic understanding and instruction*" (Akaka, 1999, 1). It will enable states to give additional help to integrate economic literacy into the school curriculum and promote public and private partnerships to support economic education.

This bill produced significant support for the National Council on Economic Education(NCEE) network by providing funds (1) to NCEE for use in its national efforts and (2) to state councils and centers through NCEE for use in activities such as teacher training programs, resource dissemination to school districts wanting to incorporate economics into curricula, evaluations of the impact of economic education on students, related research, school-based student activities, and student and teacher exchanges. The Akaka measure provides funding and flexibility to promote economic education for students in elementary and high schools (Akaka, 1999, 1).

In order for the students to be taught economics in a separate class or by integration in an area of content, teachers must have training in economics. They cannot teach something that they do not know. "*Staff development appears to be an effective method to improve the economic understanding of students. Students in the classrooms of trained teachers perform better on nationally normed tests of economic understanding than do students in the classrooms of untrained teachers*" (Schug, 1991, 150). "*The teacher is the key to what is taught in the classroom. A growing body of research suggests that in-service courses and teacher training have a direct and significant impact on students' economic understanding and attitudes*" (Walstad & Watts, 1985, 9-11).

Another limitation that teachers have is actual teaching time. Time is especially scarce in the elementary grades. It would be better to have separate courses in economic literacy, but this may be slower to happen. "*The*

dominant method of teaching economics in the United States is through integration or infusion" (Walstad & Watts, 1985, 9-11). Miller (1991) feels that a separate course in economics is better because "*students who learn economics under the infusion approach are not likely to 'acquire an overview of how individual concepts fit together in a meaningful whole*'" (p. 45). As Miller (1991) looks at a separate course realistically, however, he finds that there are important reasons "*to improve the infusion approach. The first is the critical explanatory power of economics for other subjects, such as U.S. history, and second, infusing economics can reorient the traditional emphasis from lower-level learning to problem solving and decision making*" (p. 45).

Because integration of economics will be the most likely way it is incorporated in the curriculum, the most effective methods of teaching need to be used. "*Traditional methods of instruction include 'lectures, supplemented problems sets, written assignments, and limited classroom discussion*'" (Nelson, 1997, 17). Nelson (1997) advocates that we must go beyond the traditional modes of instruction. The case method is one technique. "*Cases are narrative accounts of actual, or realistic, situations in which policy makers are confronted with the need to make a decision. Cases do not stand alone as a teaching technique but are integrated with, and supported by, a variety of other strategies, such as lectures, readings, and problem sets*" (Carlson & Schodt, 1997, 18). Demonstrations and simulations are two other effective teaching methods.

Demonstrations are methods of economic instruction and "*may be used to show the use of rules or problem-solving skills*." Simulations are methods that actively involve the learner and attempt "*to address problems under real life conditions and to discuss them completely afterward*" (Gilley, 1991, 263 ; Nelson, 1997, 18).

Literacy

Literacy starts at birth and continues throughout life. Literacy is communication through language---reading and writing. Reading is the comprehension of written language. This is a receptive process where a

message is received from the author. Writing is a productive process where a product is actually produced. "*Writing has a method and a purpose; to read, one must master both*" (Adams, 1994, 26). Literacy is a standard component of all classroom curriculum. In order to function in our world today, it is extremely important to be able to read and write at the highest level of capability.

Pehrsson (1996) asserts, "[*l]iteracy involves relationships among humans who are interacting and transacting via text*" (Pehrsson, 1996, 120). Years ago, people were considered literate if they could sign their own name. Today literacy is a huge umbrella that includes many aspects of reading and writing. Reading and writing are introduced in the early grades of school; however, literacy actually starts when children are born. Literacy begins with good oral language. Language acquisition "*is most strongly influenced by the language used at home, and is well under way in infancy*" (Ruddell & Ruddell, 1995, 34). The environment and the social interactions of families and others have a great influence. Vygotsky "*emphasizes that adult modeling and opportunity for children to interact verbally with adults are very important*" (Ruddell & Ruddell, 1995, 37).

Young children not only learn from hearing others speak, but they learn environmental print by observing their surroundings and from having others read to them. Most children know the word "*stop*," the "M*cDonald's*" sign, and their favorite candy bar or a cereal box by the time they go to school. When children are read to often and consistently, as an infant and older, they learn the concepts of print. They learn what is the front and back of a book, how it opens, the difference between pictures and print, how to turn a page, and if the book is right side up or upside down. They learn that the squiggly lines on the pages have meaning.

Environmental print and the concepts of print are important because of two basic principles that are needed to learn how to read and write. The first principle is the message principle. The "*message principle*" is the concept that printed and written materials convey a message. Writing is a form of communication. This is basic to reading comprehension. Problems develop in reading comprehension if this principle is not understood. Children must understand that there is a message contained in the written

word. The prerequisite for the message principle is that the child must understand the language. Three things that complicate this principle are: 1) if English is not the first language; 2) if the child has a different dialect; or 3) if the child has a developmental language delay. Most children learn the message principle effortlessly and naturally.

Another principle that children must understand is the "*alphabetic principle.*" It must be understood that letters, or groups of letters, represent speech sounds. This concept of basic phonics is a sound symbol correspondence. As a prerequisite, the child must be able to visually discriminate letters, and auditorially discriminate speech sounds. Visual discrimination is being able to visually discriminate the curves and lines in each letter of the alphabet. Visual memory is being able to hold the picture of the letter in short-term memory long enough to continue to the next process. Auditory discrimination (now called phonemic awareness) is the ability to hear the distinct sounds of the alphabet correctly. This includes the initial sounds (beginning consonant), medial sounds (sounds in the middle of the word) and final sounds (ending sounds). The auditory memory is the ability to hold the sounds that were just heard in short term memory, long enough to process the connection with the visual representation of the letter. If phonics is difficult for a student, there may be a deficiency in one or more of these areas. If children are able to recognize letters and sounds, it is a good predictor of ability to read and write. When children have not had experiences that help them to learn these concepts and principles at home, they need to be taught in school.

The process toward literacy can be a rich and inviting experience. Gipe (1998) suggests six principles that should be practiced by teachers in literacy development:

1)	All learners are capable and can be trusted to take responsibility for their own learning;
2)	Learning is a social process---all learners share a need to communicate and learn from each other;
3)	Learning is a building process and so learning occurs over time;

4)	What is learned is unique for each learner as what you already know affects new learning;
5)	Reflection and self-monitoring are necessary to learning;
6)	Learning occurs in the context of use, or we learn by doing, by being actively involved; thus written language (i.e., reading and writing), like oral language, is learned "*in the context of its use*" (p. 4).

These learning principles are universal for all ages and stages of development. Children can take responsibility for their own learning. Teachers need to find a way to encourage students, and create an atmosphere of curiosity to learn, and then to discover reading and writing.

Reading and writing are reciprocal and are tied to children's ability to read. Through reading, children tend to include spelling patterns in their writing that they have observed in their reading. On the other hand, when children are encouraged to use inventive spelling (spelling as they hear the word rather than by convention) and write a lot, they become better readers (Beach, 1996, 22). Developing concepts about reading are done by immersing "*them in a print-rich environment and provide opportunity daily for reading and writing to be a natural part of classroom events* (Ruddell & Ruddell, 1995, 88). Adams (1994) suggests that "*if we want children to learn to read [and write] well, we must find ways to induce them to read [and write] lots*" (p. 5).

Reading workshops encourage literacy development and are used successfully in primary grades. Two theories that contribute to the workshop's success are: 1) giving children choices and 2) giving them ownership of the workshop. During reading workshops, the children are able to make a choice from a list of activities that interest them. "*Research has shown that choice is a powerful motivator. When students can choose tasks and texts they are interested in, they expend more effort learning and understanding the material*" (Turner & Paris, 1995, 664). Another motivating force is that children as a group are allowed make up the list of possible activities. This activity gives the children ownership in their schooling. Ideas may include:

1)	Reading a book of the students or teachers choice;
2)	"*Friendly folders*" (personal space) are containers like cereal boxes where favorite books, personal writings, and textbooks are kept. These selections are kept (in their personal space) to be read again and again. Rereading books develops fluency and confidence;
3)	"*Reading the room*" is a very popular workshop activity. The children are provided with a variety of pointers, e.g., batons or dowels. The children go through the "*print rich room*" and read everything on the walls, shelves, dividers and windows; and
4)	Audio-tapes, with the accompanying books, can be available so children can read along with the book.

"*As a process, early writing development is characterized by children moving from playfully making marks on the paper, through communicating messages on paper, to making texts as artifacts*" (Ruddell & Ruddell, 1995, 316). Children need an opportunity to learn to write by actually writing for true and useful purposes. One of these purposes might be as simple as to sign their name on a sign up list or on a piece of their work. The purpose of true and useful writing is to increase fluency and sophistication in the process rather than the product (Ruddell & Ruddell, 1995, 329).

Writing workshops can be another effective strategy for literacy development. Ruddell and Ruddell (1995) emphasize that writers need a regular 'chunk of time' to write, need their own topics, need response from peers or teachers, need to learn the mechanics in context, need to know adults who write, need to read, and need to take responsibility for their own knowledge and teaching (p. 330). Material and space need to be available for the writing workshop.

The writing workshop is designed to include activities, such as: 1) Journal writing fosters creative thinking where personal thoughts, reflections, and ideas can be recorded. Students write about events happening in the world around them and are encouraged to watch the news and read the newspaper. The children are given the opportunity to sit in the "*author's chair*" (sitting in a special chair in front of the group and to share what they

wrote); 2) Another kind of journal is a dialogue response journal in which the child writes something, and then a parent or teacher responds in writing. The written conversation continues as long as necessary; 3) Writing a letter to a friend or a family member; 4) Writing a poem or a song; 5) Making a list of vocabulary words with which they are not familiar; 6) Creating a personal word wall. (Making a list of all the words that are known and categorizing them alphabetically, according to endings, or thematically.); 7) Write a book or story and illustrate it. The idea for the book or story can come from an activity that the class has participated in, personal experience or pure fiction; or 8) Writing a new ending to a story, or finishing a story line, such as: If my grandmother gave me one hundred dollars for my birthday, I would buy?

Children can also engage in tactile activities, which promote learning in many modalities. This accommodates children with different learning styles. Strategies include: creating words and sentences with magnetic letters, manipulating scrabble tiles to make up words, or developing sentences using pocket charts. Most of the above activities are accomplished in a social atmosphere. Gipe (1998) suggests:

> "*Analytic teachers have a good understanding of how human beings learn and acquire* knowledge. *Ideas from cognitive, educational, and developmental psychology, literacy and early childhood research, tell us that human beings usually learn best in social situations where they can interact, discuss, and collaborate with one another*"
> (Gipe, 1998, 44).

Economics the Content; Literacy the Process

"*Language is always a means and never an end. Reading is best learned when the learners are using it to get something else: a message, a story, or other needed information. Literacy development, therefore, must be integrated in with science, social studies, math, arts, and other concerns [economics] of the classroom*" (Adams, 1994, 91). The task to be considered is how to integrate economics into the daily curriculum of the classroom. Even though economics is not taught in the schools, language arts, reading and writing are given a considerable amount of time in school curriculum.

"*There is a growing recognition from educators and other opinion leaders that to be effective citizens, students must have a basic understanding of the economic world around them*" (Day, et al. 1997, i).

A very efficient method is to integrate economics through children's literature. Children and teachers love stories; stories have a great impact on children as they relate to them. Therefore, using literature is a highly motivational technique for learning. As economic concepts are taught within the context of literature, students realize that economics is a very real and interesting part of the world around them. Using children's literature allows teachers, as the proverb says, 'to kill two birds with one stone.' In a crowded curriculum this interdisciplinary approach is certainly appealing (Day, et al. 1997).

Saunders (1993) claims "*mastery of the basic concepts of economics*" is one of the keys to understanding of economics (p. 9). Vocabulary both facilitates reading and is increased by reading. Just and Carpenter (1989) state that reading may contribute more to vocabulary acquisition than does the intentional memorization of word meanings (p. 103). The more frequently words come to the attention of the reader, the easier it is for the reader to learn and comprehend. Automaticity is when a reader has learned the words so thoroughly that little effort is needed to recognize a new word or word parts. Automaticity is best achieved by practice in reading whole, meaningful text, not by isolated word drills (Gipe, 1998, 173-174).

Through economic literature, the children learn economic vocabulary such as: productive resources (natural, capital, and human), productivity, specialization, goods and services, scarcity and wants and needs. Vocabulary is the sum of words employed by a language, group or individual. It refers to the words used in a particular field of work or field of knowledge. Many children understand words that are spoken, but do not have the skills needed to read the words; therefore, they cannot understand what is printed. Gipe (1998) states that 'listening vocabulary' refers to words that are heard and understood in speech, while 'reading vocabulary' refers to words in print that are recognized instantly and effortlessly. Sight vocabulary refers to words in print that are recognized instantly and effortlessly.

As students start to learn economic vocabulary in the classroom, they find that they can generalize the terms to real world situations and their knowledge in proportion to the foundations they have built. Since making good decisions is a basic principle behind economics, the children will begin to look at the benefits and costs of their choices. Making good choices is using time, energy, money, and resources wisely. Children's literature can introduce and reinforce these concepts.

Through the integration of economics and literature, the children will gain a love for literature, knowledge of economics, and learn the fundamentals of literacy at the same time. Children's literature that includes economic themes is widely available. Many classics have economic concepts and are likely already included in existing classroom libraries. This literature needs to be used with the intent of emphasizing economic principles. Economic vocabulary needs to become familiar, used in the classroom, used in daily language, and applied in authentic situations that happen everyday. For example, if a child tells the teacher that he/she wants a ball for recess, the teacher could say that the balls are "*scarce*," and a "*choice"* will have to be made. Participating in interactive children's economic and literacy games are techniques to teach and reinforce economic principles and reading and writing techniques. Children love to play using their whole bodies to accomplish a goal. Playing---being creative and using imagination---is a child's way of exploring the world. Ultimately, teachers can teach, and children can learn, "*two-at-a-time curriculum*" in economics and literacy.

METHODOLOGY

Reading and writing are core subjects in schools, but economics has not been recognized as a standard component of the school curriculum. Both subjects are critical to the success and well *being of children and adults. By introducing economics through literacy methods, this "two at a time curriculum*" can help students become acquainted with economic vocabulary and concepts, at the same time, learn how to read and write. Ultimately, if the economic concepts learned through this method of partnering economics and literacy are transferred to daily classroom language and situations, students

will be able to generalize and apply them to other areas of their life. Economics is the content and literacy is the process!

The study was created to assess the effect of the direct teaching of economics using literacy methods, on the economic literacy of fifth-grade students. Participants: 1) completed an economics pre-test; 2) received direct instruction in economics through literacy methods; and 3) then completed a post-test in economics. Five fifth-grade classrooms were self-selected from southeastern Idaho to participate in this study. The objective was to determine if this direct instruction would effect the economic literacy of the fifth-grade students over a short period of time (four 45-minute sessions). The teachers selected came from a group of teachers that had previously shown an interest in economic education for their classes. Classroom scheduling and time availability of the selected classrooms was utilized to determine the final participants. The fifth-grade age group was selected in order to utilize a nationally normed test from NCEE, the Basic Economic Test (BET). This assessment tool evaluates the economic literacy for grades 4 through 6.

The study included six days in each of the five classrooms, with the same six lesson plans for each group. The format of the lesson plans included two days, one of pre-assessment and one of post-assessment using the Basic Economic Test (BET). The lesson plans for day's two, three, four and five included direct instruction of basic economic concepts using literacy methods. Two classroom teachers chose to have lessons every school day for six consecutive days. The other three teachers chose to have the economic lessons taught one day a week for six weeks. The lessons were designed to take approximately 45-minutes of class time.

The lessons were designed to encourage student interaction, an effective teaching method. For example, one lesson focused on producing bookmarks. The students were assigned to work as teams of 4 or 5 producers. To be productive, and to produce the biggest quantity of bookmarks, the team had to work closely together and communicate. This type of activity also promoted active learning, students' learning by participating cooperatively, rather than passively taking notes, or listening to teacher lectures. The

lessons were designed so students were able to apply their reading and writing skills in each activity.

Students were also asked to use deductive in order reasoning to generalize the concepts learned from one activity to other tasks. For instance, the students completed an activity on the 'law of demand' and 'the principle of scarcity' that required their knowledge of how 'incentives influenced human behavior' and how to generalize it to their lives.

RESULTS AND CONCLUSIONS

The results of the assessment, the pre and post Basic Economics Test, revealed that there was very little improvement in the student's economic knowledge. Direct economic instruction using literacy methods over a short period of time did not significantly improve test scores. Economics is a developmental subject that needs to be taught over a long period of time. Even with the use of literacy methods, students need time to assimilate and scaffold the information as they gain it.

Scores may also have been affected because children learn concepts in developmental stages. Younger children need to learn about concepts that are familiar to them and that are concrete. Teachers should introduce a few key economic principles. These can be enhanced with activities that are hands on and interactive. This will allow students to assimilate the material into their daily lives. The students need to be presented with these ideas in a progressive, developmental fashion.

IMPLICATIONS AND RECOMMENDATIONS

This research design should be replicated in another small and random selected set of classrooms. The teaching of economics using literacy methods should occur over a longer period of time, for example, a semester or a year between the pre- and post- tests. Another important feature to include in a replicated study would be to teach and assess students and classrooms at various age levels. For example, the effect of direct instruction across time could be compared between 5th graders, as in the initial study,

and perhaps 8th graders. Increasing student economic knowledge taught with literacy methods should also begin to be tracked across time. A longevity study tracking a single class from kindergarten through 5th, 8th or 12th grades would be ideal. Not only could this "*two at a time approach*" be evaluated, but the cumulative results of economic education.

The researcher recommends teaching economic concepts through literacy methods beginning at kindergarten and extending to twelfth grade, rather than the more common approach of a one semester class in high school. By learning economics through literacy methods, beginning in kindergarten, the students can have a continual daily or weekly dose. In this way, the students can be immersed in the curriculum. They will learn to generalize and infer meaning from other sources and content. Economics is a decision-making process that helps students in their personal, school, and community life, to make choices by weighing the benefits and costs. Furthermore, economics is a "*way of life*" and can enrich all other subject areas. Literacy is a process that can support economic content. Literacy is basic to all human life. It is speaking, listening, reading and writing. Economics and literacy are a perfect fit for "*TWO AT A TIME CURRICULUM*."

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