It's Never Too Early: Why Economics Education in the Elementary Classroom

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here never seems to be enough time to teach everything that administrators, policy advocates, parents, legislators, and the general public think should be addressed in the elementary classroom. Each year, elementary teachers are asked to add more and more to their already crowded curriculum. Drug education, conflict resolution, anti-bullying activities, health, and community building are but a few subjects that teachers might be expected to squeeze into the school year. These same teachers are probably expected to stay current in best practices, use new technology, plan with their peers, redesign their units to align with state standards, employ differentiated instruction, and rethink their views on planning, teaching, and assessing.

Add to this the pressures of state standards and making annual yearly progress in reading and math as legislated by NCLB, and it is easy to see why social studies instruction is being marginalized. Time for social studies in K-5 classrooms is scarce, so why should teachers make economics a part of their elementary curriculum? The reasons are many.

Decisions to Make

Building a rationale for economic education in the early grades isn't difficult. Economics is the study of making decisions given limited resources. Young children live in an economic world and bring some economic knowledge into the classroom. They learn early that they can't have everything they want. They make choices every day, such as what to wear, what electronic game to play, what to eat, what television show to watch, how to spend their money, and what to do with their time.

Too often, however, students don't understand why it is necessary for them to make choices. Nor do they realize that every choice involves a cost. Some erroneously believe they will have everything they want when they are adults. Others think the only reason they face scarcity is because adults are unfair or others impose constraints upon them. Teachers must understand and correct the confusion about economic concepts that young children bring into the classroom.¹ Failure to address these misconceptions at an early age will result in economic misunderstandings that will likely persist even if economics is taught later in a child's school experience.² As adults, today's students will face problems and make decisions that not only affect them, but also impact the lives of others. Economically illiterate adults will make such decisions "based on incorrect assumptions, misunderstandings, and misconceptions that could have been corrected during their school experiences."³

Tradeoffs

Because children can't have everything they want, they must make choices. To make informed decisions requires analyzing one's alternatives and identifying the costs (what is given up) and the benefits (what is gained) for each. Providing students with these decision-making skills empowers them to make more informed choices. Adults might not always agree with their ultimate decision, but the important thing is for students to be able to analyze the costs and benefits of their options before they make a choice and to be able to explain their decisions.

Some choices we make are "all-or-nothing" decisions. If I go swimming this afternoon, then I cannot ride my bike during that same time. Many choices we make, however, are *tradeoffs*, which involve giving up a part of one thing to get more of something else. By working through a decision-making process, students can learn that not all decisions are black or white. Economics teaches them that many solutions are not clear-cut, and fall into a grey area. Most often, we make tradeoffs—giving up some of one thing to get more of another.

Deciding what to do with limited money and time often involves tradeoffs. Offer the following situation to the class: A student receives \$50 for his birthday. He could save it for a new bicycle. But, he also wants to see a movie with friends and buy a new electronic game. What should he do?

Through discussion, students learn that if he spends the entire \$50, he loses the opportunity to save for his bicycle. Saving all of the money for the bicycle would cost him the opportunity to go to the movie (\$10) and buy a game (\$40). If he makes a tradeoff, however, he can save some money and choose either the movie or the game, but not both. Practicing with these types of problems prepares students for decision they will make throughout their lives.

Public Policy Choices

Such activities also help prepare students for analyzing more complex, societal problems. Children initially look at an environmental issue, such as cleaning up a polluted river, as an "all-or-nothing" choice: the water is clean, or it's dirty. With an understanding of tradeoffs, however, students can begin to see the incremental nature of most public policies and reforms. For example, returning an urban river to a pristine, pre-Columbian clarity is probably not possible. But improvements required by the federal Clean Waters Act (as well as state laws) have brought many urban U.S. river habitats from a terrible state of pollution to an attractive state where boating and even swimming are possible, where species of frogs and fish long absent have returned to urban shores and marshlands. A dramatic historical example illustrates the point (See **SIDEBAR**).⁴

Producer and Consumer

Students live in a market economy and therefore, should know how markets work. Why do prices change? What role do consumers and producers play in markets? Too often, students think they are victims being "ripped off," or being discriminated against when the price of a popular toy is more than they can pay. Understanding how markets work helps students learn their roles in the economy as producers, consumers, and savers, as well as the impact that market changes have on them. To help students grasp these concepts, play a market simulation in which buyers and sellers determine the market price for a product such as apples. Ask students to predict how consumers would behave if the price of ice cream rose to \$25 per gallon or fell to \$0.10 per gallon and explain their predictions. Faced with these price changes, how might producers' behavior change, and why? Read the newspaper with your students. (Can students identify headlines that involve economics?) Analyzing the articles provides opportunities to apply concepts such as markets, supply, demand, choices, opportunity cost, tradeoffs, and other economic concepts.

Ask elementary teachers what they spend most of their time teaching and the response will be "reading and mathematics." Certainly, to have a literate citizenry, students must gain the ability to read, express their views orally and in writing, and apply mathematical concepts in their daily lives. Unfortunately, all too often students don't see a purpose for school. Economics provides a context for why learning these skills is beneficial. Possessing these basic skills improves our human capital. *Human capital* refers to the quality of labor resources. One's human capital can be improved through investment in education and training. Help students recognize the link between improving their human capital (by learning to read, write, and do mathematics) and ultimately having more options in life—in both vocations and avocations.

Human Capital

The concept of improving one's human capital does have relevance to younger children. When students learn to play a musical instrument or participate in a sport, for example, they are continually improving their human capital by practicing, taking lessons, or listening to their coach to become better at what they want to do.

In the classroom, you might ask students to make a pressman's hat or an origami frog without instructions. They become frustrated and, if they are able to produce the product, it is often poorly made. Now give instructions and provide students time to practice. Ask students to make

the hat or frog again. They quickly see that by improving their human capital through instructions and practice, the final product is made more quickly and is of better quality.

The importance of improving ones human capital to be successful is often the theme in children's literature. Books such as *On the Court* with Michael Jordan by Matt Christopher, *Shoeshine Girl* by Clyde Robert Bulla, and *Frank and Ernst Play Ball* by Alexandra Day all show that success doesn't come without perseverance, practice, education, and hard work. The

Policy Tradeoffs: Cleaning Up the River

The Cuyahoga River "caught fire" in 1969 when oil slicks and debris on the river ignited. Such fires had happened before, but this instance caught the attention of the national media. Resulting from efforts that began with the 1977 Clean Water Act and continue today, the Cuyahoga River is a recreational attraction in downtown Cleveland. Oil slicks no longer mar its surface—but at the same time, we are not advised to drink directly from the river. The policy choice was not one of attempting to clean up the pollution completely or not all—it was finding a reasonable and sustainable middle path. By comparing the additional benefits of cleaner water with the additional costs of specific pollution control and reclamation efforts, policy makers (and the citizens who elect them) can make policy decisions that are environmentally and economically sustainable. lessons learned from music, sports, children's books, or an activity like making a paper hat (described above) can be applied to academics. Attending school, listening in class, and doing one's homework result in improved human capital and, ultimately, better grades.

Another way for students to acknowledge the importance of reading, writing and mathematics is by integrating economics into these content areas. Rather than learning these skills in isolation, integration of economics provides a rich context for students to connect academic learning to real-life situations. *Transfer* is defined as using knowledge or skills acquired in one context in a new or varied context.⁵ Too often, what is learned and practiced in one content area fails to carry over into another. Transfer of knowledge and skill is critical if we want students to use what they learn immediately in and out of school, today and in the future.

Interdisciplinary Activities

Weaving economics into other subject areas allows teachers to fit more into their school day. Teaching about money in math class is commonly done. This is a perfect time to teach about saving, spending, and (in the upper grades) how interest works, and to reinforce computation skills to determine cost of production, unit cost, and accounting profit and loss.

When choosing children's books for literature circles and reading aloud, select books that reinforce these economic concepts. Some examples of books that link mathematics and economics include: *Less than Zero* (saving and borrowing) and *Monster Musical Chairs* (scarcity) by Stuart Murphy; *Brock, Brock and the Saving Shock* (saving and compounding) and *Isabel's Car Wash* (borrowing, profit) by Sheila Bair; *The Pickle Patch Bathtub* (saving, earning income) by Frances Kennedy; *Arthur's Funny Money* (entrepreneur, profit, loss, goods, services) by Lillian Hoban; *My Rows and Piles of Coins* (saving, earning income) by Tololwa M. Mollel; *Max Malone Makes a Million* (entrepreneurship, profit and loss) by Charlotte Herman; and *The Toothpaste Millionaire* (entrepreneur, profit, demand, price and non-price competition,) by Jean Merrill.

Spiraling Upwards

Like other disciplines, children's understanding of economics develops through a series of stages.⁶ Knowledge of content builds on previously learned content, spiraling up through the grades, becoming more complex. This is the case for all of the disciplines, including economics. When a district scope and sequence is followed, high school students are well versed in the fundamentals and can address and analyze economic and public policy issues taking place in the world around them. Children of differing ability levels and socio-economic background can learn economics if their teachers are knowledgeable about the content and use pedagogically sound strategies and materials. When teachers know more about economics and use quality instructional materials, students learn more.⁷

Unfortunately, most textbooks available to the K-5 teachers fail to meet this need. Almost all textbooks series make the claim that they include economics. This is true; they do. However, upon closer examination, the amount, depth, and accuracy of this content are lacking. In some cases, a limited number of concepts (such as economic "wants") are taught year after year with little increase in sophistication. (See the related article in this issue of SSYL.)

Too often, the level of intellectual engagement that the textbook authors expect from the reader is at the lower levels of Bloom's taxonomy. The coverage of economics is confined to one chapter or unit, thereby presenting economics with no connection to the rest of the social studies curriculum.⁸ The lessons outlined in teacher manuals are often void of higherorder thinking skills that ought to be blended with the study of economics.

Definitions

Most egregious is the inclusion of incorrect economic information in some books aimed at students or their teachers. Definitions and examples are wrong. For example, "capital" has been defined as money, and "people" are identified as natural resources. "Demand" may be defined as how much consumers want of something, and "supply" as the amount of goods for sale. These are not economically correct definitions.

Economists define "capital" as man-made goods used to produce other goods. People are considered to be "human resources." "Demand" is the amount of a good, service, or resource that consumers are willing and able to buy at various prices. "Supply" is the amount producers are willing and able to produce and sell at various prices.

If they are presented with carelessly simplified terms, young children internalize concepts incorrectly, which then have to be relearned at a later date. For example, some students learn about government-provided goods and services without discussion about who pays, leaving them to assume that such goods and services are free.

Resources K-5

For economic instruction to occur in the elementary schools, teachers need three things: background knowledge, the resources to transfer their knowledge into the classroom, and guidance on when and where economics should be placed across the curriculum.⁹ Here are some organizations that strive to provide professional development and/or sound instructional materials emphasizing active learning and developed using best practices.

• The Council for Economic Education (CEE), a network of over 250 centers for economic education located on university campuses, offers an array of courses designed specifically for educators. In some cases, personnel are available to work with districts and schools that wish to include economics in the curriculum. To meet the needs of teachers who are not located close to centers, CEE offers online workshops. For a list of centers and their locations and online teacher training opportunities, go to CEE's website, www.councilforeconeduc. org. CEE materials include lessons on economics, personal finance and teaching economics using mathematics. Many of their recent publications have web pages that complement the print materials. For example, **EconEdLink.org** is a CEE website that includes more than 300 related lessons for K-5 students, links to appropriate sources, interactive supplements and online teacher support.

- The Foundation for Teaching Economics (www.fte.org) offers online courses for teachers as do some centers for economic education.
- State councils on economic education and their local centers offer professional development programs and classes, provide materials, and have websites with additional resources. For example, Wise Pockets World (developed by the Center for Entrepreneurship and Economic Education at the University of Missouri-St. Louis) includes stories, interactive activities, parent information and stories for parents to read with their children about personal finance. The Arkansas Council on Economic Education has a new publication, KThru 2 Can Do, Math and Economics, a set of lessons focusing on economic concepts that are reinforced through math activities. The Indiana Council for Economic Education offers a set of 22 posters, KidsEcon Posters, each focusing on a fundamental economic concept with a literature connection lesson. ICEE also has Half-Size Economics for grades K-3, a set of twenty lessons. Each includes an activity page with picture, definition of concept, literature connection, discussion questions, and worksheets.
- Econ Fun for Teachers offers *Spotting Economics: From Africa to Ice Cream*, a collection of lessons built around children's books, and *Adventures in Economics and U.S. History*, a two-volume series, *The Colonial Period* and *A Young Nation from 1765–1877*, each with lessons that examine historical events from an economic perspective.
- The twelve Federal Reserve Banks offer a variety of educational programs. Individual banks have different economic education publications and curricular materials. (See "The Federal Reserve and the Elementary Classroom" in this issue.)

Developing a district scope and sequence can be guided by state standards and, if not available for economics, by the *Voluntary National Content Standards in Economics*.¹⁰ These national standards spell out what students should know in the discipline of economics at the end of grades 4, 8, and 12. Working with teachers, districts must determine the placement of economics across all grade levels (so that economics is taught in a systematic and sequential manner) and provide teachers with the resources necessary to implement the economic curriculum.¹¹

Economic instruction needs to start early to ensure that students are well prepared for their adult roles as consumers, producers, investors, U.S. citizens, and global citizens. Young children can learn the basics of economics if teachers are knowledgeable about the content, are provided with quality instructional materials, and receive guidance on what concepts to teach and at what age children are likely to be able to comprehend them. Armed with economic knowledge and skills, students will leave school with the ability to not only make informed choices, but also recognize the long-term consequences of their decision on themselves and others.

Notes

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