Children's stories provide a valuable resource for teaching economic ideas and provide opportunities for young people to relate their experiences to the economic world. The Center for Economic Education at St. Cloud State University has compiled a bibliography of children's stories to assist teachers and librarians in selecting stories for the enrichment of student learning in economic education. This latest revision is organized into eight parts beginning with a listing of economic concepts to be introduced at the elementary K-6 level. Parts II through IV contain descriptive summaries of 100 children's stories in economics and approximately 70 summaries of articles and research on the teaching of economics in elementary grades. Recommendations for classroom use are found in the summaries. Concluding sections identify journals, newsletters, professional organizations, and other bibliographies related to elementary economic education.
Learning Economics Through Children’s Stories

Third Revised Edition

Joint Council on Economic Education
Preface

This publication was prepared primarily to update elementary teachers' knowledge of children's stories dealing with economic ideas and related social studies concepts. The annotated descriptions of children's stories and the selected articles and resource references included in this bibliography can provide valuable information to the classroom teacher and curriculum specialist. This book represents a substantial revision and expansion of two earlier bibliographies distributed by the Joint Council on Economic Education.

One hundred thirty-eight new stories not previously annotated are among the nearly 200 included in this revised edition. It is anticipated that the St. Cloud Center will provide a continuing service to the educational community by periodically updating this bibliographic reference. Teachers, librarians, and publishers are invited to send their suggestions for additions to:

National Depository of Children's Stories in Economics
Center for Economic Education
Saint Cloud State University
Saint Cloud, Minnesota 56301

We are grateful to Professors Andrew T. Nappi and William Luksetich of the St. Cloud State University Center for Economic Education and to Professor George Dawson of Empire State College's Center for Economic Education for their efforts in developing this publication. We are also indebted to the many teachers and school librarians who recommended stories they found to be effective in the teaching of economics in the elementary grades. Publication and distribution of this volume is made possible in part by a contribution from McDonald's Corporation. The authors are solely responsible for its content.

April 1978

S. STOWELL SYMMES
Director of Curriculum

Joint Council on Economic Education
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**Introduction**

Elementary school teachers have become increasingly aware that children's stories provide a valuable resource for teaching fundamental economic ideas. Children's literature is rich in the use of economic ideas and provides unlimited opportunities for young people to relate the experiences they encounter to the economic world. Children's experiences are as wide in scope as life itself and the stories, even the fairy tales they read, can help young people to discover the relation between their own experiences and their economic environment.

The Center for Economic Education at St. Cloud State University, being designated as the National Depository for Children's Stories in Economics, revised and expanded the previous (1973) bibliography of children's stories to include more current reading materials dealing with the topic. Toward this end, Center personnel read and reviewed as many of the children's stories which incorporated economic ideas as were readily available.

A second major reason for expanding this publication is to assist teachers and librarians in selecting appropriate stories for the enrichment of student learning in economic education. This latest revision of *Learning Economics Through Children's Stories* not only contains descriptive summaries of books (excluding classroom textbooks), but also includes surveys of articles and research on the teaching of economics at the elementary (K-6) level. Students of different abilities can be encouraged to read in an area of personal interest as well as in areas more closely connected to classroom lessons.

Although many of the stories annotated in this publication were not written specifically for the purpose of teaching economics, basic economic ideas can be drawn from their story content. Elementary teachers will find the stories helpful in reinforcing basic economic concepts taught within the context of the regular instructional program. The stories are intended to enlarge the students' understanding of fundamental economic ideas and to relate children's experiences to these ideas.

The vast number and quality of children's stories created each year makes any publication on the subject quickly dated. We realize that many more stories which emphasize economic ideas could have been added to this bibliography. In addition, the interests of young people and the experiences they have will continue to change and to influence authors to write more books as a response to those changes. With this in mind, the Center will continue to collect information and review books so that the bibliography can be updated. ERIC documents and professional journals such as *The Reading Teacher*, *Language Arts*, and the *Horn Book* magazine provide extensive listings of stories which will facilitate the task of revising this bibliography. Individual publishing houses, too, distribute catalogs which contain annotations of new books, indicating selections appropriate for young people.

**Significant Insights**

Children's stories are an integral part of the elementary teaching-learning
experience and have become a major vehicle for teachers to expand and articulate both cognitive and affective instructional goals. As this bibliography was being prepared, the project developers gained a number of insights from the experience which seem important enough to pass on to others.

1. Children's stories influence tolerance awareness. They often deal with real-life experiences which enable young people to become conscious that they are active participants in the economic process. It is during the early formative years, when the child has boundless curiosity and an earnest desire for answers to many "why" questions, that the preparations for adult roles in the economic process begin. Through the stories they read, children can be introduced to a wider range of economic experiences and practices than might otherwise be possible.

2. Children's stories provide motivation for learning. The wide variety of content coverage in all areas of human concern, which children's stories attempt to communicate, can help to generate enthusiasm for studying basic facts about issues and problems that bear economic significance. With the avalanche of new stories created each year, the opportunity is rapidly improving for identifying appropriate stories that appeal to a wide range of student interests and yet emphasize basic economic ideas.

3. Children's stories affect attitudes. Through observation and participation children begin at an early age to acquire attitudes and knowledge about economic life. Young children observe the economic behavior of their parents and neighbors when they accompany them on shopping trips or watch them at work. Children are often directly involved in economic activity through purchasing activities, such as comparing the prices and contents of various products they buy; through-school savings programs; and through working at small jobs in the home. Stories can also help children to gain feelings of participation in the economic process which can importantly affect their personal lives. Young people through their reading may develop empathy for the difficult economic choices faced by their families, and this may even spread to include those faced by real-life decision-makers in the larger economy.

4. Children's stories provide opportunities for personal growth. The availability of children's stories in the classroom helps young people to sharpen their literary skills. Current research on the topic suggests that stories lend support to conceptual development and vocabulary expansion. Although the effectiveness or preference for children's books over basal readers has not been fully established, research findings have shown how trade books can be used to enrich a variety of curriculum areas and to promote literacy.

Criteria for Inclusion

The criteria followed for the selection (or exclusion) of children's stories found in this bibliography are listed below:

1. The selections had to meet the following working definition established by the Center for the term "story":

   - A story is a narrative description of a happening or connected series of happenings, whether true or fictitious, written in prose.

Stories included in educational magazines, news articles, journals or basic
textbooks used for classroom instruction were not annotated. Only narrative accounts written for the library and bookstore market rather than for text use—as part of a series of graded instructional books—were reviewed and annotated by the project developers.

2. The reading level had to be suitable for the elementary (K-6) grades. Each story reviewed in this publication was classified by grade level. A standardized readability formula was used to determine the level of reading difficulty.¹

3. The stories had to illustrate economic concepts or principles. This gave the project a very wide range of stories to review, from those confined to a single concept to others that dealt with broad topics or issues. However, no matter how broad or narrow the range of story content, at a minimum the stories emphasize basic aspects and dimensions of economic knowledge related to children's everyday experiences.

4. The selections had to have general application to some part of the total elementary school curriculum. Many of the stories reviewed contain examples of economic concepts which can be appropriately reinforced and strengthened in the context of an arithmetic, spelling or science lesson; other stories may be more effectively utilized by the teacher to articulate and enrich economic understandings developed in the social studies program. This criterion for inclusion was wide enough to accommodate many teacher needs and yet sufficiently narrow to give the bibliography a central focus.

5. Stories with a copyright date of 1970 or later received first priority for inclusion. Children's stories with earlier copyright dates were reviewed and included in this bibliography at the discretion of the project developers. Many of the stories excluded were out of print and not readily available for classroom use.

Suggestions for Classroom Use

Using children's stories effectively in the classroom means using them as a supplement to, rather than a substitute for, the instructional program. The reviews in this publication were prepared specifically to assist teachers in communicating and expanding basic economic ideas already included in their school curriculum. To maximize the impact of stories in the classroom, therefore, may require as much teacher preparation time as any other instructional techniques, a change in the teacher's approach to instruction, and supporting resource and curricular materials. The following suggestions may help the teacher to decide how and when to use stories as curricular supplements.

1. As introductions to lessons or units of instruction: Obviously, the teacher must understand and precisely specify the economic concepts students will be expected to know at the conclusion of the lesson. Once the basic concepts are identified and carefully defined and the teacher has become familiar with the books the children will read, the story content can be more closely articulated with the unit of study being undertaken. Some key lead-off questions should then be developed that provide a point of departure and focus on economic concepts. These questions should be few in number, explicit, well thought out, and specific.

¹George H. Maginnis, "The Readability Graph and Informal Reading Inventories," *The Reading Teacher*, 22, no. 6 (March 1969).
in purpose. In addition, lead-off questions should place greater emphasis on thought processes that extend beyond the memory category than on rote information recall. Such questions require the students to use economic ideas as well as remember them and give the teacher opportunity to expand the students' understanding of these ideas during the instructional phase.

2. As a culminating activity: The teacher can often maximize the value of stories by using them at the end of the lesson or unit of study in order to solidify economic concepts taught during the instructional program. In this way, less able students may gain greater understanding of the economic ideas because they become related to the children's individual backgrounds and experiences. Similarly, the stories may lead high-ability students to more sophisticated and relevant inquiry. Careful attention must also be given to the period right after the unit of study is completed. At that point the teacher can guide student learning by selecting appropriate reading materials and by having ready follow-up study questions tailored to the needs of students. In this way students can be assured of learning experiences which accommodate their differences in intellectual ability, interest and aptitude. Perhaps the greatest amount of economic learning occurs when students are provided with the opportunity to build upon the outcomes of instruction through personally motivated reading. Stories selected on the basis of prior learning and understanding are a means of letting students experience events or perhaps even gain insights in a personal way.

3. As a complete lesson or unit: Depending upon the instructional techniques employed or the educational objectives emphasized; it may be appropriate to develop minilessons based upon the economic concepts gleaned from the stories children express an interest in reading. Greater motivation and knowledge can often be gained from the lesson when students are given an opportunity to select the content areas to be studied. Certainly, this approach demands more from the teacher since it requires greater flexibility in method and careful organization. To begin with, the teacher can make available a variety of books dealing with economic topics and can take time to familiarize students with the content and level of difficulty of each story. This will help to guide children toward reading stories closely related to their interests and capabilities and may guard against frustration and embarrassment caused by inappropriate story content or reading level. After the students have read several stories, the teacher should solicit suggestions concerning the topics or ideas the children would like to study in more detail. The topics should be recorded on the chalkboard. It is important clearly to define and articulate the ideas students suggest in order to provide study topics with a central focus. Students can then be asked (individually or in groups) to select for further investigation a topic which is of particular interest to them.

4. As follow-up learning activities: After students have discussed economic ideas introduced in connection with an enjoyable instructional unit, they may want to continue reading on an economic topic. It may even be that some students have been motivated to write their own narratives expressing economic ideas they learned about. In either situation, it is essential that the teacher carefully plan follow-up learning activities to accommodate new interests and concerns that may develop from the educational programs undertaken. Children's stories can meet this planning need. Since any delay in providing additional reading material
may cause loss of student interest, it is important for teachers to identify appropriate supplementary reading materials dealing with many topics and have the books easily accessible. Student writing assignments can be very rewarding experiences for both teacher and student, but they are potentially frustrating and require much classroom preparation. To assist students who wish to develop their own stories, teachers need to be adequately prepared in economic understanding. Furthermore, this type of activity typically requires students to use special writing and verbal skills which may block the pursuit of an economic idea.

How to Use This Bibliography

This annotated bibliography is divided into eight parts. The divisions are intended to provide clear identification and efficient access to reading material in the field. It is expected that this publication will be of use to readers with differing interests, including elementary teachers, curriculum supervisors, reading consultants, school librarians and economic educators.

Part I deals with the teaching of economics at the elementary level. Concepts that are essential in helping teachers to educate children to be responsible citizens and effective decision-makers are described.

Part II is an annotated listing of children's stories in economics. Each annotation includes the story title, its source of publication, the subject it emphasizes, its reading level, and a description of the economic ideas that can be drawn from the story content. A survey of this section immediately identifies the wide range of economic topics covered by the selections. No attempt has been made to evaluate the usefulness of any particular book in helping children to achieve economic understanding. Entries are alphabetical by title.

Part III is an annotated survey of selected research on economics in the elementary school. For each study the research questions analyzed, study design used, statistical procedures employed and findings reported are summarized. This part of the bibliography should be of special help to economic educators interested in undertaking further research in this area.

Part IV contains a selected listing of articles and reference material relating to the teaching of economics in the elementary school. It includes descriptions and discussions about economic concepts, teaching methods and classroom activities. The annotated information in this section is meant to help teachers interested in developing a complete economic education program in their school.

Part V contains a selective list of journals and newsletters in the field that can be obtained by teachers on request or by individual subscription.

Part VI lists the professional organizations in the field. Interested teachers and educators may want to become members of these organizations or receive up-to-date information from them on children's books.

Part VII contains a selected list of bibliographies of children's stories.

Part VIII lists the names and addresses of the publishers of the stories identified in Part II of this bibliography.
One important goal of economic education in the elementary school is to help children to become responsible citizens and effective decision-makers. But what is responsible citizenship? What is effective decision-making? How will children deal with the economic issues and questions they are likely to meet as adults? How can their exposure to current issues and questions be used in the classroom? What economic knowledge and skills are required of elementary teachers if they are to address these issues and questions effectively in the classroom?

Individuals are exposed over their lifetimes to a wide range of economic issues and concerns. Much of this exposure comes through newspapers, magazines, radio and television, as well as through participation in political campaigns and community organizations. Citizens as wage earners, consumers and investors find themselves face to face with economic problems. The handling of these problems can affect the economic well-being of the individual as well as the social system. If children are to have a sound education in economics, they must acquire a wide-ranging knowledge of the subject and basic repertoire of problem-solving skills. Only then can they understand and make rational decisions about major economic questions facing society and themselves as members of the society.

Which economic concepts are most important to the economic literacy of teachers and their pupils? Until recently, the profession had developed no conceptual framework for economic education. The profession had yet to identify a precise body of knowledge and skills needed for personal economic understanding and rational decision-making. However, economic educators have been continuing their scholarly efforts to clarify a conceptual structure, to specify what it means to be economically literate, and to describe how economics is put to use in thinking and deciding.

The need to develop a concise up-to-date statement of basic concepts for teaching economics in schools below the college level was recognized by the Joint Council on Economic Education in the early 1970s. The Joint Council in conjunction with scholars from education, business, labor, agriculture, economics, and government initiated the Master Curriculum Project and began the task of specifying the structure and content of economics that should be learned in school from kindergarten through grade 12. The project was a systematic attempt to give direction and shape to teacher preparation programs in economic education. The result was a crowning achievement for the profession, a consensus on a conceptual framework in economics which spells out the concepts and skills required if economic understanding is to be achieved.

The key elements of economic understanding which evolved from the undertaking of the Joint Council are summarized in the Master Curriculum Guide in

The concepts deemed to be of fundamental importance for economic understanding in the schools are grouped into four broad clusters labeled: The Basic Economic Problem, Economic Systems, Resource Allocation and Income Distribution, and Economic Stability and Growth. Twelve major concepts in these clusters are discussed briefly here to help elementary teachers to organize their thinking as they address economic issues and questions in their classrooms:

### Basic Concepts

**Economic wants.** Shows the relationships between production and consumption and helps to explain what economics is all about.

**Productive resources.** Examination of resources and their use in production.

**Scarcity and choices.** Deals with the basic economic questions that individuals and societies must decide in facing scarcity.

**Opportunity costs.** Involves analysis of the decisions individuals and societies make regarding the use of scarce productive resources.

**Economic incentives.** Focuses on different motivating forces behind economic behavior such as profit, competition, and self-interest.

**Specialization and division of labor.** Centers on the division of productive tasks among workers, the production of goods and services, and the factors that determine domestic and international trade.

**Interdependence.** Provides the basis for understanding relationships between resources and finished products and the overall structure of the economic system.

**Markets.** Helps to explain how demand and supply determine the price of what is bought and sold.

**The price system.** Essential in explaining how consumers spend their money, how savings are invested, and what is produced.

**Aggregate supply.** This major idea refers to the total amount of goods and services an economy can produce when all its resources are fully and efficiently employed.

**Aggregate demand.** The basic forces that control total spending, savings, production, and investment in the economy are examined here.

**Savings, investment and productivity.** These key ideas provide a conceptual framework for understanding why economic growth rates vary among nations.

All these concepts should be introduced into the K-6 curriculum at some point. They are essential to economic understanding. However, we are aware of the hurdles that must be overcome in raising the level of economic literacy, particularly through improved education in the schools. Time in the school curriculum is limited. Moreover, difficulties are compounded by the lack of a wide range of suitable classroom materials and the ineffective use of available materials by inadequately trained teachers. In short, the schools can only hope to reduce economic illiteracy; they cannot expect to eliminate it.
Recommendations and Suggestions

What can the school do to increase economic understanding? Here are a few suggestions and recommendations that can be used to build an economic education program in the elementary school:

1. **Teachers should master the basic concepts.** It is realistic to acknowledge that only a limited number of concepts can be included and taught effectively in the school. Teachers should focus on what the profession recommends as the basic concepts, since these provide the basis for helping children understand and use the other concepts. However, nothing prevents teachers from incorporating all the concepts. Only the most essential among the many concepts in economics have been recommended.

2. **Select appropriate curriculum materials and resource aids for teaching economics.** What kinds of teaching materials are most useful? Materials must illustrate the use of major concepts, they must offer opportunities to analyze economic issues, and they should require an evaluation of the consequences of policy decisions and actions. The material must be rich in detail, but not so rich as to overwhelm. The material should enable children with different values to reach different conclusions about economic issues and questions posed. Open class discussion offers children a splendid opportunity to get the reactions of their peers and their teacher as they examine and analyze issues and values. While testing out ideas and values on their peers and teacher, children may gain important insights and understandings which will contribute to their own economic and social well-being and society's as well. Children may discover that there is not always one "correct" answer and that individuals attach different priorities to different issues and values. Ultimately, children and adults must reason for themselves.

3. **Critically evaluate the treatment of the economic content emphasized in social studies curriculum.** Textbooks, stories, and curriculum series vary considerably in the treatment of economics. Teachers analyzing textbooks and other instructional materials may find it difficult to determine exactly which concepts are economic. The major concepts as well as the relationships between concepts are not always clearly presented. In too many cases, concepts seem to be selected on a hit-and-run basis, with no apparent conceptual framework for their development. Because of such difficulty, a high priority should be assigned to materials that contain the fundamental economic ideas and key relationships for elementary school.

4. **Use appropriate evaluation instruments to measure economic literacy.** Evaluation instruments should be used to determine children's ability to learn the basic economic concepts. Nationally normed and validated tests designed to measure economic learning, as well as appropriate teacher-made evaluation instruments, may be used to determine the long-range impact of programs in economic education. Surveys can be conducted to learn whether children, teachers, administrators, parents and school boards are interested in programs in economic education. Research can be done to determine how children learn economic concepts and how these concepts can be presented to coincide with their stages of cognitive development.

5. **Examine the relationship between instructional objectives and economic understanding.** It is essential that elementary school teachers define the concepts
children must master to achieve economic understanding. Learning can be improved if instructional goals are clearly stated and presented to children. Such statements should describe the situation in which economic learning is to occur, specify the performance expected, and explain how achievement will be measured. Furthermore, the teaching methodology should include a problem-solving approach to enhance the decision-making process. Whatever teaching methods are used to attain educational objectives, a precise description of the behavior expected is necessary for economic learning. The objectives should specify different levels of expectation for various age and grade levels of children.

Concluding Comment

Economics has much to offer children. It can give them a framework for making rational decisions. It can enrich their understanding of the world in which they live, play, and work. To achieve economic understanding, children must make sense out of the unfolding array of economic issues coming to their attention. They must be familiar with the concepts and methods of economics, and they must be able to apply these concepts and methods in a reasoned and informed way that will make them more effective decision-makers and citizens.

In summary, it is intended that this bibliography of children's stories serve a need in the field of elementary economic education. There are available countless stories and library books, excitingly written, laced with real characters as well as fictional ones, which bring economics to life. Only a sampling of the books which seem to relate basic economic concepts to children's experiences are presented and should be extremely helpful to teachers.
Annotated Listing of Children's Stories in Economics

Elementary Grades (K-6)

Title: ABC of Ecology
Author: Harry Milgram
Publisher: Macmillan, 1972
Subject: Environment, Economics, resources
Reading level: Kindergarten-2nd grade

Each letter in this alphabet book alerts children to a different environmental problem and shows how young people can help. The text can be extended to a discussion of various alternative programs designed to improve the environment and to an analysis of their costs and benefits. The concepts of resources, scarcity and choice-making are briefly introduced.

Title: About Garbage and Stuff
Author: Anne Zane Shanks
Publisher: Viking, 1973
Subject: Technology, resources, recycling
Reading level: 1st-2nd grades

A discussion of recycling from the child's viewpoint. The amount of garbage and the problem of disposal are described. Recycling of resources and ways by which individuals can avoid waste are discussed. The text can be used to indicate that many resources are reusable.

Title: African Adventure
Author: Marian Hostetler
Publisher: Herald Press, 1976
Subject: Agriculture, poverty
Reading level: 5th-6th grades

Full names and addresses of the publishers are given in Part VIII.
Students get a first-hand view of another culture and economic system through the experiences of a family moving from Illinois to Africa to help raise food to feed starving people. The story stresses that economic growth is a universal concern, but is particularly important to the developing nations because they need to increase productivity to raise their living standards. Capital investment and technology are shown to be essential conditions for promoting growth.

Title: The American Congress
Author: Ann E. Weiss
Publisher: Messner, 1977
Subject: Government
Reading level: 3rd through 6th grades

The legislative branch of our government is examined from its formation through its many reforms. The role of government in the American economy is described through the policy actions of Congress. Examples are provided of government regulation and controls and of how intervention in the economy influences the allocation of productive resources.

Title: Anita's Choice
Author: Dorothy Hamilton
Publisher: Herald Press, 1971
Subject: Migrant workers, resources, farming
Reading level: 4th-5th grades

Some of the economic problems a migrant family faces are described through the experiences of a fourteen-year-old Mexican-American girl living in Indiana. Social practices and customs such as discrimination and tradition are shown to have an impact on income and living conditions. The story provides the starting point for a discussion dealing with government's efforts to redistribute income to people with relatively low incomes.

Title: Apples: A Bushel of Fun and Facts
Author: Bernice Kohn Hurst
Publisher: Parents' Magazine, 1976
Subject: Production, farming
Reading level: 3rd through 6th grades

A brief history of apples and how they grow is presented. The cultivation of apple trees, recipes for using apples, and myths and legends about them are described. The book includes an index and illustrations, and may be used as a reference source to study the agricultural sector of the American economy.
At Work
Richard Scarry
Golden Press, 1976
Labor, production
1st-2nd grades

Animals act out various occupations and professions. Comments on what they do are included. Production, specialization of labor, and economic interdependence are topics which can be developed further from the story content.

Barbapapa's Ark
Annette Tison and Talus Taylor
Scholastic, 1974
Externalities, pollution
3rd-4th grades

The Barbapapas, who are capable of changing their shape, find that they and their animal friends are being stalked by hunters and overcome by water and air pollution. In response, they show society the costs of pollution when they leave the planet and return only after earth is made green again. This story can be used to indicate the social cost of pollution and the interdependence of people and their environment.

Barter, Bills and Banks
Barry Tarshis
Messner, 1970
Money and banking
6th grade

Illustrates that our whole system of specialized production and of buying and selling goods and services in markets requires the use of money. The author describes the earliest forms of money used in different parts of the world, explains how money works in our economy, and introduces the Federal Reserve system as the mechanism of the government to control the lending and deposit-creating activities of the banks. The subject of inflation is briefly treated in connection with the stabilization techniques used by Federal Reserve authorities to bring about a contraction of the money supply and thus of total spending.

Baseball's Most Valuable Players
Hal Butler
Messner, 1977
Specialization, income distribution
3rd-6th grades

The stories of the winners of baseball's highest accolade, the Most Valuable Player Award, may provide the reader with some knowledge of how the
market establishes the value of a person's services and compensates him or her accordingly. The reader can come to understand how wages and salaries (the price of labor) determine the incomes of workers and help to allocate labor among different uses including professional sports.

Title: Be a Smart Shopper
Author: Kathlyn Gay
Publisher: Messner, 1974
Subject: Consumption, advertising
Reading level: 4th-5th grades

Introduction to intelligent buying techniques. A discussion of advertising psychology is included. Young readers are encouraged to look for quality in the products they purchase.

Title: Beat It, Burn It and Drown It
Author: Suzanne Hilton
Publisher: Westminster, 1974
Subject: Resources, government regulation
Reading level: 6th grade

Government controls and regulations regarding safety requirements for consumer products are discussed. The story describes how products are tested for safety and quality through various methods including shock and impact, fire and water, smashing, shaking, stretching, and squeezing. The objective is to show how government influences what and how goods and services will be produced and distributed for consumption.

Title: Behind the Wheel
Author: Edward Koren
Publisher: Holt, Rinehart & Winston, 1972
Subject: Transportation, capital, technology
Reading level: Kindergarten-6th grade

Contains pictures of numerous transportation and work vehicles. The illustrations help to explain the importance of transportation to an economy, the use of tractors and bulldozers as capital goods, and the different technologies available to accomplish certain production tasks. A glossary explains what the various instruments on the vehicles are and what the controls do.

Title: Being Poor
Author: Janet Rosenberg
Publisher: Carolrhoda, 1977
Subject: Income distribution, wealth, poverty
Reading level: 2nd-3rd grades

This story is about poverty and illustrates the concept of equity, as it manifests itself in the distribution of income and wealth. Readers may gain some
knowledge of how income is distributed in the U.S. and how economic actions influence this distribution. The concepts of welfare and government transfer payments can also be introduced and studied in conjunction with the text.

Title: Be Nice to Spiders
Author: Margaret B. Graham
Publisher: Harper & Row, 1967
Subject: Economics, externalities
Reading level: 3rd grade

The concept of positive externalities is demonstrated through the example of a spider in a zoo who by spinning her web to catch flies and other insects for food benefits the zoo animals who would otherwise be pestered by the insects. The importance of the externality concept lies in recognizing that the economic activities of individuals may have effects upon the activities of others who were not associated with the original transaction. The story can be used to introduce students to the idea that many of our economic problems center around the concept of externalities and that citizens must take externalities into account in considering the extent to which government should increase or decrease its economic role.

Title: The Big City Book
Author: Annie Ingle
Publisher: Platt & Munk, 1975
Subject: Urban economics, specialization, markets
Reading level: 2nd-3rd grades

A tour of a big, modern city. Different areas of the city are pointed out, as are its economic activities, government, changing appearance, and recreational, educational and cultural facilities. The importance of the transportation and communication systems is noted. The teacher can stress the function of markets in allowing for the specialization observed in cities.

Title: Black Sunshine—The Story of Coal
Author: Olive W. Burt
Publisher: Messner, 1977
Subject: Energy: resources and production
Reading level: 3rd through 6th grades

A case study in the application of economic concepts to the analysis of the U.S. and world energy problem. The author explains how coal is regaining its importance as supplies of oil and natural gas dwindle. A topical study is presented of how coal was formed, of how it was mined in the past and today, and of the people who work at one of the most hazardous occupations in the world.
The story of an eleven-year-old boy and his mother in search of a cheaper place to live is used to examine the goal of economic justice or equity. The reader is reminded that there is little agreement on what is equitable; people differ in their conception of what represents fairness or justice in the distribution of income.

Title: Piero Ventura's Book of Cities
Author: Piero Ventura
Publisher: Random House, 1975
Subject: Interdependence, urban economics, economic and social aspects of cities, comparative economic systems
Reading level: 6th grade

Descriptions of the economic and social aspects of cities throughout the world. Highlighted are the unique aspects of London, Hong Kong, Moscow, Rome, New York, Milwaukee, and many other cities. Chapter titles include: Living in a City, Getting Around in a City, Working in a City, and Having Fun in a City. Interdependence in city life is emphasized as are cultural advantages, industrial aspects and varying market systems and economic institutions.

Title: The Boy, The Baker, The Miller and More
Author: Harold Berson
Publisher: Crown, 1974
Subject: Coincidence of wants, barter, money
Reading level: 3rd grade

A boy, who wants a piece of bread, must first get the key to the cupboard from the baker. To obtain the key he must bring an apple. To get the apple from the gardener he must get a cat to chase a mouse. Useful for drawing attention to the difficulty of finding a coincidence of wants in a barter system and the functions of money in a modern society.

Title: The Bridge to Blue Hill
Author: Margaret L. Tenpas
Publisher: Carolrhoda, 1972
Subject: Private benefits, social costs, government
Reading level: 2nd-3rd grades

About a woman who seeks approval from the town council to have a bridge repaired. The ideas presented may be used to explain a major function of government, that is, when the benefits of an activity (repairing a bridge) can
be shared by the community as a whole, perhaps government should undertake the project.

Title: The Busy Book  
Author: Ali Mitgutsch  
Publisher: Golden Press; 1976  
Subject: Interdependence, markets  
Reading level: Preschool-Kindergarten

A picture book showing numerous economic activities that take place daily in metropolitan, country, and seashore towns. The specialization of tasks and interdependence in towns can be stressed. The function of markets in providing goods and services to individuals in towns can also be pointed out.

Title: Canals: The Big Ditch Waterways  
Author: Solveig P. Russell  
Publisher: Parents' Magazine, 1977  
Subject: Resources, social capital, transportation  
Reading level: 2nd through 4th grades

A study of waterways and the roles they play in economic and political relations. The planning, construction, and agricultural and commercial uses of canals are discussed. The relationship between the construction of canals and improvements in efficiency is shown.

Title: A Cap for Jack, A Coat for Jill  
Author: Anne Neigoff  
Publisher: Whitman, 1972  
Subject: Production, distribution  
Reading level: Kindergarten-2nd grade

An introduction to the clothing industry. The concepts of specialization and the function of markets are explained. The material presented can be used to illustrate the stages of production, and the story can be extended to a discussion of the circular flow of income.

Title: Careers in Auto Sales and Service  
Author: Christofer Benson  
Publisher: Lerner, 1974  
Subject: Labor, automotive industry, division of labor  
Reading level: 5th-6th grades

The work of sales managers, salespersons, mechanics and service managers are explained. The book can be used to illustrate specialization and division of labor. Also, the importance to the economy of the macroeconomic effects of significant changes in the automobile industry can be stressed.
Title: Careers in a Bank
Author: Mary Davis
Publisher: Lerner, 1977
Subject: Banking, specialization of labor
Reading level: 2nd through 4th grades

Introduces the reader to 15 different jobs within the field of banking, including teller, bond trader, international banker, safe-deposit clerk, and security guard. The many different skills and educational experiences needed for each career are pointed out. Full-color photographs showing actual work situations are included. (This book is part of a series of 24 dealing with a variety of career fields.)

Title: Careers in Conservation
Author: Christofer Benson
Publisher: Lerner, 1974
Subject: Labor, externalities; government, public goods
Reading level: 4th-5th grades

An explanation of the work of conservationists such as wildlife management biologist, forester, air pollution inspector, sanitation engineer, and historical sites preservation specialist. The role of government in providing public goods, such as clean air and historic sites, can be presented. Pollution and wildlife management or historic sites preservation can be explained in terms of negative and positive externalities.

Title: The Careless Animal
Author: Ada and Frank Graham, Jr.
Publisher: Doubleday, 1975
Subject: Social costs, private costs; role of government
Reading level: 6th grade

Nine cases are described throughout the world where private actions have had unexpected results on the environment. The materials can be used to discuss the problems that result when the private costs of an action do not equal its societal costs. The role of government in controlling such externalities can be introduced. Pollution (a result of individuals not bearing the full cost of their actions) can be emphasized.

Title: Caring for Trees on City Streets
Author: Joan Edwards
Publisher: Scribner's, 1976
Subject: Ecology, conservation
Reading level: 4th through 6th grades

Intended especially for urban students, this book describes the usefulness of city trees and how young people can help to select, plant and care for them.
The author, who pioneered the concept of neighborhood tree corps for children, has included experiments which serve to clarify economic concepts. The text helps to explain why tree conservation is important and is supported by many illustrations.

Title: Carpentry  
Author: Karin Kelly  
Publisher: Lerner, 1974  
Subject: Specialization of labor; production, capital goods  
Reading level: 3rd-4th grades

The types of wood and tools a carpenter must learn how to use are shown. The steps involved in building a bookcase and a birdhouse are described and the concepts and production techniques are explained with accompanying pen-and-ink drawings. The presentation begins with a historical anecdote about the craft.

Title: Cars, Trucks and Trains  
Author: Su Swallow  
Publisher: Grossett & Dunlap, 1973  
Subject: Transportation, production  
Reading level: 1st-3rd grades

Transportation-related topics are covered, such as roads, car making, motor racing, parking, etc. The importance of transportation in a modern society is illustrated. Production techniques used in making automobiles are mentioned.

Title: The Castle  
Author: Dorothy Hamilton  
Publisher: Herald Press, 1975  
Subject: Wealth, income, money  
Reading level: 5th-6th grades

The story of a teenage girl who befriends the daughter of the richest man in town can be used to help young people to understand the factors that determine the size of a person's money income. Students should gain some insights about the sources of personal wealth and how income is distributed in the U.S. The difference between earned income and income received in the form of inheritance and transfer payments can be pointed out.

Title: Central City/Spread City  
Author: Alvin Schwartz  
Publisher: Macmillan, 1973  
Subject: Urban economics  
Reading level: 6th grade

The focus is on a typical metropolitan region. Life in a decaying inner city is compared with economic conditions in a nearby suburb with its growing
population problems. Can be used to introduce students to the causes of such problems and their proposed solutions.

Title: Charco
Author: Dorothy Hamilton
Publisher: Herald Press, 1971
Subject: Unemployment, income distribution, welfare
Reading level: 4th-6th grades

Recorded here are the almost insurmountable problems faced by a boy whose family lives on unemployment and welfare checks. The boy's experiences provide the setting for a discussion and analysis of government transfer payments. Children are led to understand that government policy, as provided by law, has a major effect on the distribution of income.

Title: Charlie Needs a Cloak
Author: Tomie DePaola
Publisher: Prentice-Hall, 1973
Subject: Production
Reading level: 2nd-3rd grades

A shepherd shears his sheep, spins the wool, weaves and dyes the cloth, and sews a beautiful new red cloak. Concepts such as stages of production, manufacturing and the occupation of tailoring can be explained. Specialization and interdependence among individuals, businesses and regions and the overall structure of the American economy can be demonstrated.

Title: Christmas Tree Farm
Author: David Budbill
Publisher: Macmillan, 1974
Subject: Production, distribution, renewable resources
Reading level: 3rd-4th grades

Each stage in the production of Christmas trees is examined, from the collecting of seedlings through the planting, harvesting, and delivery of the finished product to the consumer. The different machinery and activities involved at each stage of production are described. This pattern of activity reveals the circular flow of goods, services and productive resources in the U.S. economy.

Title: City and Suburb: Exploring an Ecosystem
Author: Laurence Pringle
Publisher: Macmillan, 1975
Subject: Ecology, conservation, pollution
Reading level: 4th through 6th grades

In words and distinctive pictures, the author introduces the reader to the ecology of metropolitan areas. The reader discovers how animals, plants and
people adapt to a rapidly changing environment and how a city and its surroundings are related. Can help to illustrate why pollution is a special problem of production and consumption.

Title: The City Book
Author: Lucille Corcos
Publisher: Golden Press, 1972
Subject: Urban economics, specialization, interdependence
Reading level: Kindergarten through 2nd grade

Pictures of New York City are included in this text, which covers just about all the economic activities found in urban areas. The work of teachers, police and others is discussed. Transportation systems, housing and other facets of city life are detailed. Specialization and interdependence are stressed.

Title: City Traffic
Author: Beulah Tannenbaum and Myra Steilman
Publisher: McGraw-Hill, 1972
Subject: Urban transportation, pollution, prices
Reading level: 3rd-5th grades

Urban traffic problems are discussed. The authors explain attempts to solve city traffic problems and present alternative proposals. The material can be used to consider proposals designed to reduce traffic congestion and pollution problems associated with automobile use in metropolitan areas.

Title: Clothes Tell a Story: From Skin to Space Suits
Author: Cecil and Winifred Lubell
Publisher: Parents' Magazine, 1977
Subject: Production, natural resources
Reading level: 2nd-3rd grades

A history of clothes and some speculation on what clothes of the future will look like. The methods of making synthetic fibers are illustrated. Stages of production in the making of clothes are fully described and illustrated.

Title: Coal: Energy and Crisis
Author: Lillie D. Chaffin
Publisher: Harvey House, 1974
Subject: Natural resources, labor, environmental problems, pollution
Reading level: 4th-5th grades

A survey of coal, covering the formation, types, locations and uses of this energy source. The lives of miners and the danger of strip-mining and pollution are discussed. Coal is shown as an alternative for other energy resources and can be studied as an example of substitute resources and goods.
The story of a young boy who tries to earn enough money to care for his new pet is used to illustrate the concepts of opportunity cost and money income. The important idea for children to realize is that individuals must decide how to use their limited money incomes to satisfy their unlimited wants for goods and services. Thus, when people make choices about how to allocate scarce resources, and limited money income among alternative uses they are involved in making a trade-off or opportunity cost decision.

Information on the history, cultivation, harvesting, processing and multiple uses of coconuts are presented (along with recipes). The information can be used to illustrate stages of production and the economics associated with specialization.

Facts and illustrations are presented to introduce the grade school child to computer processing. Important current uses of computers, such as for the space program, weather predicting, postal sorting and traffic control are mentioned. The book can be used to show how improvements in technology lead to greater efficiency and economic growth.

A historical account of how people and economic, social and political institutions change the environment. Chapters on forestry and farming, water
and life, wildlife conservation and management, and pollution of the environment are included. The concepts of public goods, externalities and interdependence can be developed from the ideas presented.

Title: Consumer Protection Labs
Author: Melvin Berger
Publisher: John Day, 1975
Subject: Consumer, government
Reading level: 5th-6th grades

The reader is taken on a visit to a variety of consumer protection labs. Government food and drug labs, food processing labs, industrial labs, and auto safety labs which seek to maintain and improve the quality of products are described and illustrated with photographs. The book helps to explain how government policies and actions influence what will be produced and how it will be produced.

Title: The Continental Shelves
Author: John F. Waters
Publisher: Abelard-Schuman, 1975
Subject: Environment, ecology, resources
Reading level: 5th-6th grades

A discussion of the extensive underwater environment, its contributions to life on land, how people harvest its resources, and what the future may be like. Can be used as a sourcebook by children studying about productive resources and how resources may be transferred from one use to another.

Title: Cotton: From Farm to Market
Author: Winifred Hammond
Publisher: Coward, McCann & Geoghegan, 1968
Subject: Technology, production, economic growth
Reading level: 5th-6th grades

The vertical stages of production of cotton are described, from the growing of the cotton through the production of cotton cloth. The impact of mechanization (capital-intensive production techniques) on the cotton industry is examined to show how industry activity can be altered by technological change. The combination of a variety of factor inputs to produce a final output is also described.

Title: Dams: Water Tamers of the World
Author: Bernice Kohn Hunt
Publisher: Parents' Magazine, 1977
Subject: Social capital, production, externalities
Reading level: 2nd-4th grades

A history of dams from beaver beginnings to current hydroelectric systems. Economic and sociological impacts of dams are discussed. The ideas can be
used to study social overhead capital and the public-good nature of dams, i.e.,
the significant externalities associated with dams that make private construc-
tion difficult and thus a function of government.

Title: A Day Off
Author: Tobi Tobias
Publisher: Putnam's, 1973
Subject: Leisure, work, substitutes
Reading level: 3rd-4th grades

About a young boy who likes to be slightly sick once a year; sick enough to
take a day off from school, but not so sick that he can't watch television or
play with his toys. The story can be used to show how leisure serves as a
substitute for work and has economic value in itself.

Title: Diamonds
Author: Sara Hannum Chase
Publisher: Franklin Watts, 1971
Subject: Resources, production
Reading level: 5th-6th grades

Provides historical information and facts about diamonds. Diamond mining,
diamond cutting, and the uses of diamonds in industry are described.

Title: Dinner's Ready!
Author: Anne Neigoff
Publisher: Whitman, 1971
Subject: Resources, distribution, food
Reading level: Kindergarten-2nd grade

The purpose is to provide a general idea of where food at restaurants or at
home comes from. The ideas in the text can be extended to a discussion of
markets in general, reasons why the food we want is available to use in the
quantities we desire, and the role of profits in the allocation of resources.

Title: Disappearing Energy: Can We End the Crisis
Author: Dorothy E. and L. A. Shuttlesworth
Publisher: Doubleday, 1974
Subject: Energy resources, production
Reading level: 5th-6th grades

Factual data on the use and misuse of energy and descriptions of how coal, oil
and other fuels are searched for and found are given. The material can be
applied to a discussion of various methods of conserving energy, including use of the price system to reduce consumption and increase production.

Title: Energy
Author: Irving Adler
Publisher: John Day, 1970
Subject: Energy, production, complementarity
Reading level: 6th grade

A discussion of what energy is, various sources of energy, and the types of energy we use. The importance of energy in production is emphasized. The relationship of energy to the wealth of a nation is analyzed and its complementarity with capital in production is briefly described.

Title: Energy All Around
Author: Tillie S. Pine and Joseph Levine
Publisher: McGraw-Hill, 1975
Subject: Natural resources, energy, technology
Reading level: 2nd grade

The sources and uses of energy are described and the need for energy conservation is stressed. An explanation of what "energy crisis" means is attempted. Research into new energy sources and new uses of an old energy source—the wind—are emphasized.

Title: Energy: Its Past, Its Present, Its Future
Author: Martin J. Gutnik
Publisher: Children's Press, 1975
Subject: Natural resources, energy, technology
Reading level: 3rd-4th grade

The importance of energy is explained along with a discussion of various energy resources. The importance of changes in technology as a potential agent in generating additional energy sources is emphasized. Definitions of various types of energy and their uses are presented.

Title: Energy: Power for People
Author: Laurence Pringle
Publisher: Macmillan, 1975
Subject: Energy, resources
Reading level: 5th-6th grade

An examination of the current energy crisis. The limited energy resources of the earth and promising sources of power for the future—solar, wind, and
geothermal— are used to illustrate important concepts related to the economics of the U.S. and world energy problem.

Introduction to the important ideas of specialization and division of labor. The authors show how productive tasks are divided to permit resources to be used more efficiently and to take advantage of the gains of worker specialization. These concepts can lead to a discussion of the development of an exchange economy and the use of money to facilitate exchange.

A guide to farming in different countries around the world: the diversification of farming in both organization (communes, kibbutzim, individual farms) and produce (milk, coffee, barley) is described. A summary of why all farms do not produce the same amount of food is presented.

An explanation of what happens to the environment when the quality and quantity of natural resources are changed. The material can be used to explain government's role in environmental preservation and to discuss various methods of pollution control. A presentation and analysis can be given of government efforts to correct for externalities or side effects that result when production and consumption activities in the market affect the welfare of others.
The place, structure and functions of local government units are described. The most common forms of local government are introduced, including the duties and responsibilities of specific departments. Sources of local government revenues and their disposition are specified. Functions of the various local government officials are presented.

The difference between want and effective demand is described in situations in which individuals discover products they want, but which they cannot afford to buy. It is observed that an individual can convert his wants to effective demands through application of his labor power (by getting a job) which will allow him to earn an income and pay for products.

A survey is made of the production, transportation, and consumption of foods and beverages throughout the world. The importance of transportation systems can be emphasized and the interdependence of rural and urban areas discussed. Methods of achieving economic goals in different economic systems can be compared.

This is an introduction to modern food production. The advances and improvements in transportation and communication that contribute to the U.S. agricultural revolution are described. The role of scientific research in overcoming problems and improving farming methods are briefly discussed.
From Barter to Banking
William W. Wade
Macmillan, 1967
Money, evolution of money
5th-6th grades
The history of money as a medium of exchange is traced from premonetary barter to the evolution of complex modern financial institutions. The different forms of money in modern society are examined, as are the institutions of the American monetary system including the Federal Reserve system. Basic elementary ideas dealing with the creation of money, the functions of money, and the purpose of monetary policy can be developed from the story content.

From Idea Into House
Rolf Myller
Atheneum, 1974
Production, specialization
5th-6th grades
An introduction to the architect's part in siting, planning and constructing a house. Valuable are the table of linear metric equivalents, an explanation of symbols used, and the glossary. Detailed plans and an explanation of the work and responsibilities of the architect are included.

From Trails to Superhighways; The Story of America's Roads
Adrian A. Paradis
Messner, 1971
Transportation, social capital, choice
4th-5th grades
This narrative traces the development of roads in the U.S. from the first trails to today's superhighways. The building of roads and the advantages of superhighways are discussed. The opposition of conservationists to such roads is mentioned, and the choices society must consider regarding superhighways are presented.

Fuel for Today and Tomorrow
R. J. Lefkowitz
Parents' Magazine, 1974
Resources, energy, environmental economics
2nd-4th grades
The point is made that everything that moves needs energy, that is, fuel. A discussion of the advantages and disadvantages of various types of fuel is.
undertaken. Air pollution and thermal pollution as externalities are mentioned. The material can be used to trigger a discussion of the benefits and costs associated with various proposals for pollution abatement.

Title: Good Cents
Author: Members of the Amazing Life Games Co. (and friends)
Publisher: Houghton Mifflin, 1974
Subject: Money, consumption, production, markets
Reading level: 5th-6th grades

A collection of ideas on how to earn and spend money income. The activities described can be used to illustrate the function of markets and the circular flow of money. A discussion of saving and taxes on earned income can be undertaken.

Title: Good Lemonade
Author: Frank Asche
Publisher: Franklin Watts, 1976
Subject: Competition and product quality, consumer protection
Reading level: 1st-2nd grades

About a young boy who tries all types of gimmicks to sell his bad-tasting lemonade. He finally decides that the best way to do it is to have a good product. The book can be used to emphasize that as long as competition exists and buyers have alternatives, sellers with low-quality products are at a disadvantage. They either have to sell at a lower price or leave the industry.

Title: The Great Brain at the Academy
Author: John D. Fitzgerald
Publisher: Dial Press, 1972
Subject: Money, profit, economic incentives
Reading level: 4th-5th grades

The important ideas of money, profit and production are examined in the context of an innovative business venture. The story points out the importance of the profit motive in a market economy. It also explains how, in a competitive market, profit spurs both efficiency and growth.

Title: The Great Energy Search
Author: Elaine Israel
Publisher: Messner, 1974
Subject: Energy, resources
Reading level: 4th through 6th grades

The history of energy development is reviewed in sufficient detail for younger readers. The sources, uses, and methods of obtaining fossil fuels (coal, oil,
natural gas), electricity, and solar energy are discussed. A short chapter describes sources of future power. Illustrations are included along with photographs, maps, and graphs.

Title: Green Grass and White Milk
Author: Aliki
Publisher: Crowell-Collier, 1974
Subject: Production, distribution, resources
Reading level: 2nd-3rd grades

The story of milk from grass to pasturization process in the dairy. The process of handling milk from the cow to the finished product is described. The material can be extended to a discussion on delivering the product to the final market and on the circular flow of goods.

Title: Hats, Caps and Crowns
Author: Leonard S. Kenworthy
Publisher: Messner, 1977
Subject: Economic wants, traditions, customs
Reading level: 3rd through 6th grades

Photographs of headcoverings used around the world give a view of cultural and economic differences and similarities of traditions and customs. A helpful introduction to some important economic concepts including basic or subsistence wants for goods and services. The practicalities and esthetics associated with the use of different headcoverings are also illustrated.

Title: High Rise
Author: Beulah Tannenbaum and Myra Stillman
Publisher: McGraw-Hill, 1974
Subject: Land use, scarcity, urban economics, specialization
Reading level: 4th-5th grades

Planning and construction of high-rise buildings as alternative dwellings in order to compensate for land scarcity are the topics examined. The roles of various specialists who are engaged in building high rises are discussed. Alternative land use is one of the main study topics emphasized.

Title: Honeybees
Author: Jane Lecht
Publisher: National Geographic, 1973
Subject: Externalities, market failure, role of government
Reading level: 3rd-4th grades

Specialization and division of labor in a honeybee colony are described. Products derived from hives are illustrated and the benefits from the activities of the bees are presented. The role of the beekeeper is briefly described.
The concept of economic freedom, as it relates to the rights of individual consumers to decide how they wish to satisfy their wants, is illustrated in this story about the joys and responsibilities of having one's own horse. Government controls and restrictions over the private use of some goods and services through regulations and policy actions are identified. The rationale for government involvement in the market place is briefly treated.

The use of natural resources in the production of building materials is described along with a detailed explanation of the ways in which geographic and climatic conditions affect the choice of building materials in particular locations. Specific examples of different types of housing construction are given and pictorial material is provided. Various aspects of the production process and the way in which production is organized are explained.

The concept of market system is developed with descriptions of the roles played by businesses, households and government. The nature of economics as a social science is examined with an eye toward making the student aware of the complexities of economic decision-making. Emphasis is placed on the concept of resource scarcity and the necessity of making rational choices among alternative uses of productive resources.

A description of the development of methods of transportation from early times to space exploration. The effects of improvements in transportation on trade and cultural change are discussed. The relationship between improvements in transportation and increased efficiency because of increased ease of exchange can be introduced.
The process of using resources to produce goods and services that satisfy people's wants is described. Natural, human, and capital resources are shown to constitute the input to production. The story can be used to study the concepts of specialization, comparative advantage, and the division of labor.

Some basic economic concepts are introduced, using a lemonade stand as an example. The narrative describes the functions of business from the combining of the raw materials—lemons, water, and sugar—to the selling of the product for profit. Activities firms engage in, such as mergers, capital financing, and investing are introduced. The problems of competition, strikes and boycotts faced by the firm are discussed. Humorous illustrations complement the narrative.

Students are introduced to some of the different activities of a financial institution during a field trip to a local bank. Savings and lending activities of banks are described. Emphasis is placed on the various duties of tellers, with particular attention being devoted to checks as money. Various types of bank accounts are mentioned.

This story provides an analysis of the process by which consumer goods are distributed to frontier settlers and includes a discussion of trade and barter between early settlers and the American Indians. It is pointed out that as the number and variety of consumer goods increased, retail stores proved more...
advantageous than individual barter exchanges. The increasing size of the retail stores resulting from the growth of small villages into larger towns and cities is also discussed.

Title: Iceberg Alley
Author: Madelyn Klein Anderson
Publisher: Messner, 1976
Subject: Transportation, resources
Reading level: 5th-6th grades

A story about North Atlantic icebergs, which have menaced shipping since the Vikings, is used to explain how in regions of the U.S., for example, the gifts of nature determine which goods and services can be produced most efficiently. The concept of division of labor is examined through the work of the International Ice Patrol. The life cycle of icebergs, their structure, and the dangers they present are described.

Title: Ideas About Choosing
Author: John E. Maher and S. Stowell Symmes
Publisher: Franklin Watts, 1969
Subject: Economics, choice
Reading level: 5th-6th grades

The concept of economic wants is presented, and the idea is emphasized that everyone has to make a choice. To acquire goods and services, income must be earned. Functions of money are explained. Relatively unlimited wants and limited means are discussed.

Title: Ideas About Taxes
Author: John E. Maher
Publisher: Franklin Watts, 1972
Subject: Government, taxes, externalities
Reading level: 5th-6th grades

The activities of the various levels of government—federal, state and local—are discussed. Different methods of taxation are described and difficulties associated with raising government revenues are presented. Public and private goods are distinguished, and criteria for public goods are presented.

Title: Indian Summer
Author: F. N. Monjo
Publisher: Harper & Row, 1968
Subject: Interdependence
Reading level: 1st grade

The interdependence of individuals in even relatively uncomplicated societies is examined, as is the role that social units, such as the family, may play in the making of essentially economic decisions. It can be observed that
all individuals depend upon others to provide many of the goods and services they want. Interdependence is shown to be a consequence of specialization.

Title: Indians: The First Americans
Author: Patricia Miles Martin
Publisher: Parents' Magazine, 1973
Subject: Comparative economics, production, resources
Reading level: 1st through 3rd grades

The author describes the tribes of the Woodlands, Desert, Plains, the West, and the North, with special attention to their values, economy, tribal histories and food-gathering and home-building techniques. Reservation life of two modern-day tribes is described in detail as well as the lives of Indians who live in cities. Foods, languages, games, and art given by these first Americans are presented.

Title: Inflation in Action
Author: Adrian A. Paradis
Publisher: Messner, 1974
Subject: Inflation, macroeconomics, money
Reading level: 6th grade

Inflation is defined and some of its effects are presented. Current proposals for controlling inflation are examined. Inflation as a tax can be emphasized and its redistribution of income effects analyzed.

Title: Jobs People Do
Author: Jane Belk Moncure
Publisher: Children's Press, 1976
Subject: Labor, specialization, exchange, circular flow
Reading level: 3rd grade

Designed to make children aware of the many kinds of jobs people do at various times—indoors and outdoors, standing and sitting. The book can be used to explain the concepts of efficiency, specialization, interdependence and the importance of markets in facilitating exchange, leading easily to a discussion of the circular flow of economic activity.

Title: Katie Goes to Camp
Author: Eleanor Schick
Publisher: Macmillan, 1968
Subject: Division of labor
Reading level: 2nd grade

The concept of division of labor is explained through an examination of the operations of a summer camp and the ways in which the campers must
cooperate and coordinate their activities to complete their chosen projects. The point is made that when individuals specialize in the jobs they are best able to perform, greater efficiency is achieved and more goods and services are produced.

Title: Katydid: The Singing Insects
Author: Barbara Ford
Publisher: Messner, 1976
Subject: Specialization, division of labor
Reading level: 4th-6th grades

The work of entomologists specializing in this fascinating family of secret singers is used to illustrate the concept of division of labor. A description is given of the various tasks and research activities of scientists studying these large, green, tree insects. A glossary and instructions for katydid collecting are provided.

Title: A Kid's Guide to the Economy
Author: Manfred G. Riedel
Publisher: Prentice-Hall, 1976
Subject: Microeconomics, macroeconomics
Reading level: 4th grade

A guide to basic economic concepts such as recession, taxes, inflation, economic growth, and capitalism. Almost all the ideas presented in a standard college course on principles of economics are covered. An overview of the functioning of the U.S. economy is provided.

Title: I Know a Grocer
Author: Lorraine Henriott
Publisher: Putnam's, 1970
Subject: Retailing, producers, consumers
Reading level: 3rd-4th grades

The economic aspects of retailing are treated through an examination of the operation of a retail grocery store. The grocer is shown to be an intermediary between producers and consumers of foods. He is valuable to society because he stands ready to sell at fixed prices a wide variety of food products that consumers would otherwise not have available. The concept of the circular flow of economic activity can be related to the story content and provides a useful tool of analysis.

Title: Labor Day
Author: James Marnell
Publisher: Thomas Y. Crowell, 1966
Subject: Labor unions
Reading level: 2nd-3rd grades

Some of the factors underlying the rise of American unionism are discussed, including a description of various unfair labor practices historically employed.
by management before the existence of labor unions. The benefits of unions to the working public in the form of higher wages, improved working conditions, and improved fringe benefits are noted. The narrative provides a starting point for discussing key concepts (real wages, money wages, and labor productivity) as well as important issues (featherbedding and protective tariffs) related to the formation of unions and the development of collective bargaining.

Title: Labor Unions in the United States
Author: Carolyn Sims
Publisher: Franklin Watts, 1971
Subject: Labor unions
Reading level: 4th through 6th grades

A history of labor unions. The acquisition of power by unions and how they aid their members are discussed. The responsibilities of unions and their shortcomings are also presented.

Title: Last One In Is A Rotten Egg
Author: Leonard Kessler
Publisher: Harper & Row, 1969
Subject: Goods and services
Reading level: 1st grade

The fact that services as well as tangible goods have economic value is illustrated through the example of a lifeguard who provides lifeguarding and swimming instruction rather than commodities in the usual sense. Children learn that not only goods or commodities but consumption services as well help to satisfy our wants directly, i.e., having a service performed is just as much "consumption" as wearing clothes or eating an ice-cream cone.

Title: Learning About Steel Through the Story of a Nail
Author: Irving and Ruth Adler
Publisher: John Day, 1961
Subject: Production, consumption
Reading level: 4th-5th grades

The simple nail is chosen to illustrate the complex process of producing goods for final consumer use. The production process is discussed from the mining of the iron ore through the production of steel to the stamping and shaping of the finished product. The enormous variety of consumer goods required by society is observed through the analogy of the great variety of different sizes and shapes of nails produced.
Title: Learning to Choose  
Author: Lazer Goldberg  
Publisher: Scribner's, 1976  
Subject: Choice-making, values, technology  
Reading level: 4th-6th grades.

Essays about science, technology and human values. A good introduction to the basic economic problem of scarcity which confronts all individuals and societies. An appendix contains suggestions for conducting discussions with children.

Title: Let's Find Out About the City  
Author: Valerie Pitt  
Publisher: Franklin Watts, 1968  
Subject: The city, urban economics, public works  
Reading level: Lower elementary

The operation of the city as an economic and social entity is analyzed. The importance to the city of social institutions such as law and law enforcement is described as is the city's need for funds for public works projects. It is also noted that while the city produces goods and services, it must rely on agricultural production elsewhere to supply its food. This specialization of work provides for more production of goods and services.

Title: Let's Go to a Stock Exchange  
Author: Gordon V. Axon  
Publisher: Putnam's, 1973  
Subject: Stock exchange, securities, markets  
Reading level: 5th-6th grades

On a trip to a stockbroker's office, two children learn the basic principles behind the sale of stocks and bonds. Functions of the stock market and operations of the stock exchange are explained. The story can be used to explain, among other things, the workings of competitive markets and the functions of markets generally.

Title: Life on Paradise Island  
Author: Harmon W. Wilson and Roman F. Warmke  
Publisher: Scott, Foresman, 1970  
Subject: The evolution of an economic system  
Reading level: 5th-6th grades

The process by which an economic system evolves from a primitive to a more advanced state is analyzed. The importance of making rational economic decisions is shown to increase as the size and complexity of the community grow. The evolution of economic institutions, such as markets and production units, is also discussed.
This narrative contains a discussion of the economic role of rail transportation in the U.S. and a description of how the railroads have played an important part in the development of our country by providing low-cost transportation of individuals and commodities. Also analyzed is the concept of intermodal competition, in which railroads must compete for passengers and freight with trucking and air transportation. It is pointed out that an essential part of the market mechanism in a price-directed economy is competition.

About a little doll made one hundred years ago and now living with a family in Hong Kong. The story revolves around events that take place in a busy marketplace. Differences in cultures and economic organizations can be emphasized using this story.

About children deciding what they can do to celebrate their town's birthday. The children discover that they are confronted with difficult choices in deciding how to spend their limited money incomes. They also learn that people in the U.S. are free to decide how they wish to allocate their spending among various goods and services, how much to save or invest, and what kind of business to establish. The ways in which government regulations open up or restrict freedom in the marketplace can be identified and evaluated.

The discovery, exploitation, and destruction of a multiuse resource—the truffula tree—is described. The purpose of the book is to indicate that the
pursuit of a private goal (profit) may not be consistent with the public interest because of the generation of negative externalities—pollution of air and water and the destruction of a natural resource. The story can be used to emphasize government's role in reconciling public and private interests.

Title: Love Comes to Eunice K. O’Herlihy
Author: Gail Hamilton
Publisher: Atheneum, 1977
Subject: Consumer protection, government regulation
Reading level: 5th-6th grades

The story of a family of Hawaiians who buy a plot of land in Montana helps to illustrate the importance of knowledge of market conditions on the part of consumers. The rationale for government involvement in many markets with controls and regulations for consumer protection is emphasized. Students may come to understand that many consumers are not always well informed about the quality of the products on sale or the alternate choices they have to consider in deciding how to spend their money incomes.

Title: Man and Materials: Coal
Editor: Ian Ridpath
Publisher: Addison-Wesley, 1975
Subject: Resources, stages of production
Reading level: 4th-5th grades

A survey of early and modern methods of extracting and processing coal. The stages of production are described, and the various uses of coal and coal products are presented.

Title: The Man Who Made Everyone Late
Author: Yuri Suhl
Publisher: Four Winds, 1974
Subject: Economic value and resources
Reading level: 4th-5th grades

A man has a penchant for making everyone late because of his inability to answer a question in less than five hundred words. The story points out the value of time and can be easily extended to a discussion of economic value and the efficient use of resources in production and consumption activities.

Title: The Man Who Made Fine Tops
Author: Marie Winn
Publisher: Simon & Schuster, 1970
Subject: Division of labor, resources
Reading level: 2nd-3rd grades

The importance of specialization and division of labor is demonstrated. The major advantages of specialization and the division of productive tasks among workers are developed. The text points out that people normally
specialize in producing goods and services at which they are best suited and, as a result, must purchase many of the goods and services they need from others.

Title: Meet the North American Indians
Author: Elizabeth Payne
Publisher: Random House; 1965
Subject: The American Indian economic system
Reading level: 2nd grade

The history and development of the economy of the North American Indians is described as an example of the evolution of an aboriginal economy. The initial dependence of the Indians on hunting and fishing is examined as is the use of tools, which represents an embryonic form of production employing both capital and labor. Emphasis is given to the way in which the Indian people go about making decisions with respect to the use of their scarce resources.

Title: Michael Allen Found a Dime
Author: Nathan Zimelman
Publisher: Carolrhoda, 1972
Subject: Money, choice-making
Reading level: 2nd-3rd grades

A story about a young boy who finds a dime is used to illustrate the concept of economic wants and choice-making. The notion is introduced that individuals must decide how to allocate their limited money income among competing uses. The concepts of scarcity, consumption, goods, and services are also emphasized.

Title: Milk, Butter, and Cheese: The Story of Dairy Products
Author: Carolyn Meyer
Publisher: Morrow, 1974
Subject: Production, distribution, resources
Reading level: 5th-6th grades

The dairy industry and its products are discussed. The production, processing and end products of the industry are surveyed. The patterns of production, distribution, and consumption activity surveyed reveal the circular flow of economic activity.

Title: Money & Kids: How to Earn It, Save It, and Spend It
Author: Mary Price Lee
Publisher: Westminster, 1973
Subject: Consumption, production, markets, consumer education
Reading level: 6th grade

The subtitle of this book, which deals with making money, is "How to Earn It, Save It, and Spend It." It is a guide to the discussion of money, what
money can do, how to earn it, spend it wisely, and save it. The material presented can be used to discuss the economic concepts of production, consumption and markets.

Title: Money-Making Ideas
Editors: Cameron and Margaret Yerian
Publisher: Children's Press, 1975
Subject: Money
Reading level: 2nd-3rd grades

Children are introduced to the concept of money through a discussion of money-making ideas ranging from dog walking to rummage sales. The activities described can be used to define what money is, discuss the money supply, and explain how money is created by the banking system. Students may come to understand that the banking system creates money by making loans to individuals, businesses and government, and thus increases the spending power of these economic units.

Title: Mothers Can Do Anything
Author: Joe Lasker
Publisher: Albert Whitman, 1972
Subject: Work, income, resources
Reading level: 2nd grade

The wide range of occupational roles women perform in the economy is examined. The concept of opportunity cost can be explained in the context of the costs and benefits associated with each of the many job alternatives available to women. The kinds of decisions women must make in choosing a career are also discussed.

Title: New Women in Media
Author: Kathleen Bowman
Publisher: Children's Press, 1977
Subject: Work, production, resources
Reading level: 5th-6th grades

One in a series of six books for the intermediate grade student, focusing on women at work in nontraditional roles. Each book is devoted to several women in a particular field including politics, medicine, entertainment, art, and dance, and social sciences. Women's relatively recent acceptance in the media field is discussed as well as the new attitudes they have toward work and the economy in general.
Different jobs that must be performed each night in a city are described. The activities of policemen, bakers, computer programmers and dock workers are presented. The material can be used to discuss the concepts of specialization and the division of labor.

The concept of the division of labor and its role in increasing productivity and economic well-being are illustrated through a discussion of the operation of a family circus in which each member of the family has his or her own specific act. The objective is to show how the standard of living of a group of people can be increased when individuals specialize in jobs they are best fitted to perform.

The history of child labor in the U.S. is traced from colonial times to the present. The conditions under which young children worked in the nation's mills, coal fields, sawmills and canneries are described. The work of anti-child-labor reformers, including labor unions, schools, religious organizations, and the National Child Labor Committee, which led to the enactment of state and federal child-labor laws, is briefly treated.

A story of the origins and uses of oil: how oil is found, extracted, transported and refined. An excellent reference for a discussion of the stages of production. The material presented can be used to illustrate the circular flow of income in the economy.
Oil: Buried Treasure
Roma Gans - Thomas Y. Crowell, 1975
Resources, trade, stages of production
1st-2nd grades

A brief discussion of how oil is formed and how it is recovered from the ground. The importance of oil in the manufacture of many things we use every day—plastics and cloth and paint and steel—is indicated. The oil distribution system and the refining of crude oil into more useful products are illustrated.

The Other Side of the Mountain
Interdependence
5th grade

The concept of economic interdependence is illustrated through the example of an artist who befriends and helps animals who, in their turn, become subjects for the artist's paintings, which he sells to earn his livelihood. Students can learn to understand the importance of specialization, and interdependence in helping a society to decide which goods and services and how much of each should be produced to satisfy economic wants and needs.

Our Dirty Air
Sarah M. Elliott - Messner, 1971
Air pollution, externalities; government
4th-5th grades

Sources of air pollution such as car exhaust fumes and factories are described. Measures for alleviating the situation are explained. The text can be used to illustrate the difference between private and social costs of production and the control of pollution as a role for government.

Our Dirty Land
Sarah M. Elliott - Messner, 1976
Pollution, externalities
5th-6th grades

Various aspects of pollution in the environment are discussed, including refuse disposal methods, the Wilderness Act, strip mining, pesticides and...
land-use laws. Activities designed to increase awareness of pollution problems are included. The material can be used to emphasize pollution as a social cost and that the solution to the problem may be the internalization of all costs of production.

Title: Our Hungry Earth: The World Food Crisis
Author: Laurence Pringle
Publisher: Macmillan, 1976
Subject: Food, technology, production
Reading level: 6th grade

The problems the world must face and the decisions it must make concerning food and famine are described. The information presented introduces the reader to the ways different people and societies organize economic life to find answers to social problems. The importance of economic growth to the developing nations, which need to increase productivity to raise living standards, is pointed out.

Title: The Owl and the Prairie Dog
Author: Berniece Freschet
Publisher: Scribner's, 1969
Subject: Economics
Reading level: 3rd grade

A joint-venture between owls and prairie dogs in developing an "early warning system" against the depredations of hawks and eagles provides an example of the way in which joint activities undertaken by society as a whole may yield greater benefits than the sum of the efforts of the members of society acting separately. Provides a point of departure in helping children to discover the economic role of government (federal, state and local).

Title: Park Rangers: Equipment, Training and Work of the National Park Ranger
Author: C. B. Colby
Publisher: Coward, McCann & Geoghegan, 1971
Subject: Land utilization, resources, conservation
Reading level: 4th grade

A description of the training, equipment, and actual duties of the rangers, who are responsible for guarding federally owned parks, seashores, monuments, and other historic sites. The subject matter can be used to present the idea of job specialization and the concept of public goods, land and other property as recreation resources.
How family members and people in the community help one another in everyday situations. The idea of specialization of tasks is presented. The concepts of interdependence and gains from specialization can be further developed in follow-up classroom discussions.

The uses of petroleum are explored. The author explains how this resource is located, obtained from the earth, and changed to fit people's needs. A discussion of pollution problems and of the diminishing supply of petroleum is included. Graphs, diagrams and photographs are an important part of the presentation.

An analysis of the development of technology in the fishing industry is presented; including an examination of the preparation of fish for consumption and the methods of transporting fish to consumers. Emphasis is given to the concept of scale and the advantages that highly automated firms enjoy over the single fisherman. Considerable pictorial material is provided.

The importance of forestry products is explained in detail along with a listing of some of the wide variety of products that come from forests, such as fuel, wood products and paper products. The story includes an analysis of the need for conservation practices and a commentary on the role of research and technological development in the production of new forestry products.
The operation of a market is examined by explaining the role of producers in the satisfaction of consumer wants. It is observed that the development of population centers is, in part determined by people's needs and wants and, further, that even separate communities are dependent on one another since they are rarely self-sufficient. Emphasis is also placed on the market as the basic institution of the American economy and as the mechanism which permits individuals to carry out their economic decisions.

The story of the development of plastics is used to analyze how new products are created. The author provides numerous examples of the wide variety of uses to which plastics are put and stresses that through research and development new and even more varied uses will be discovered. The emphasis is on the use of technology to create new consumer commodities and find ways to produce existing ones more cheaply.

The growth cycle of the type of corn used for popcorn is described. The author identifies various members of the corn family, gives a brief history of popcorn, and explains in detail how children can grow popcorn and learn from experience many of the ideas presented. The various stages in the growing and production of corn used for popping are discussed.

A history of potatoes and how they are grown and processed. Also included is a discussion of the future of potato growing as researchers develop new and...
more specialized varieties. There is an index, and suggestions are given for experiments with potatoes. Production, specialization and capital are some of the concepts stressed. A companion volume by the same authors is *Apples: All About Them*.

Title: Railroad Yard  
Author: Paul C. Ditzel  
Publisher: Messner, 1977  
Subject: Transportation, division of labor, production  
Reading level: 3rd through 6th grades

An inside look into the workings of a railroad yard, its computerized operations, and its people. Various jobs—from switchmen to pin pullers to cinder dicks—are described. The concept of division and specialization of labor is illustrated, and the importance of railroad transportation discussed.

Title: Rice  
Author: Franklin Watts  
Publisher: Children's Press, 1977  
Subject: Farming, production, specialization  
Reading level: 3rd-4th grades

An introduction to rice as a basic food and a description of its value to the world. The author explains where and how rice is grown. A comparison is made of farming methods as done by hand in China and Southeast Asia with the American method, which uses airplanes to plant and fertilize the crop. A map showing the rice-growing areas of the world is provided.

Title: Sail, Calypso!  
Author: Adrienne Jones  
Publisher: Little, Brown, 1968  
Subject: Economics, production  
Reading level: 6th grade

The joint exploitation of economic opportunities is illustrated in a situation where a number of children find a wrecked sailboat. No single child can repair the boat, but once the ownership rights to the wreck have been assigned to one child, he can then barter the use of the boat for the labor required to repair it. The story content can be related to the concept of private property in the U.S., which embraces not only the ownership of productive resources, but also certain rights, e.g., the right to set the price of one’s product.
This story traces the 300 million years of the shark's existence, describing its efficient systems of survival. The author emphasizes that as we study the shark we are amazed by the secrets we discover and how much we still have to learn about the shark and sea life itself. The text can be used to explore the potential of the ocean in providing new sources of food and energy.

A collection of explanations, experiments and observations about why our Earth is indispensable and what we must know and do to protect our land, air and water. Economic issues raised by pollution and its abatement are discussed. The problems of measuring the costs of pollution and the alternatives for pollution control, prevention or abatement are briefly pointed out.

The concepts of conservation and recycling are introduced as ways of solving environmental problems. Renewable and nonrenewable resources are distinguished. The ideas may be used to indicate that if the cost of waste increased, the amount of waste would be reduced.

Traditional sources of energy and the search for new power sources are viewed in light of the energy shortage. The importance of technology in
economic progress can be pointed out, especially as it relates to new energy sources. Substitutes for energy, e.g., sweaters, insulation, and changes in architectural designs of buildings can be stressed.

Title: See My Garden Grow
Author: Jane Belk Moncure
Publisher: Children's Press, 1976
Subject: Substitutes, alternatives
Reading level: 3rd grade

About planting, caring for, and harvesting a garden. Although it is a how-to-do-something book, it can be used to illustrate the way many individuals substitute home-grown for store-bought produce, especially when food prices increase. This could lead to a discussion of the effects of price changes on purchasing patterns.

Title: Shadows Over the Land
Author: J. J. McCoy (Foreword by Senator Edmund Muskie)
Publisher: Seabury, 1970
Subject: Conservation of natural resources
Reading level: 6th grade

The problem of pollution of the earth's supplies of air, water and land is introduced. The author observes that these resources are exhaustible and that it is possible to contaminate them to the point where it will no longer be possible to restore them in sufficient quantities. The connection between increasing urbanization and increasing pollution is discussed.

Title: Ship Cargo
Author: Jane Behrens
Publisher: Children's Press, 1971
Subject: Transportation, trade
Reading level: 3rd-6th grades

Historical developments and modern innovations in shipping are detailed. A description is given of how products of the world are moved across the waterways, and ancient and contemporary vessels and technology are compared. The material can be used to introduce the concepts of specialization, comparative advantage and interdependence among nation-states.

Title: A Skyscraper Goes Up
Author: Carter Harman
Publisher: Random House, 1973
Subject: Urban economics, land use, specialization and division of labor
Reading level: 5th-6th grades

This book follows the process of planning and building the Exxon Building in New York City. Site selection, architectural planning, and the operation of
the building are among the topics discussed. Costs are briefly mentioned. The
text can be used to discuss land scarcity and the resulting alternative of.
high-rise buildings.

Title: Snorkel
Author: George Flexer
Publisher: Prentice-Hall, 1975
Subject: Choice, specialization
Reading level: 3rd-4th grades

A junior lifesaver finally convinces his older brother that the rules of water
safety really can save his life after he chooses to ignore them. The story can be
extended to a discussion of choice in general. Also, job specialization is
emphasized.

Title: Social Welfare
Author: Walter Myers
Publisher: Franklin Watts, 1976
Subject: Welfare programs, poverty
Reading level: 4th-6th grade

A history of the care of the poor in the U.S. and the development of the first
national welfare act. Situations causing individuals to go on welfare and the
difficulties in getting off welfare are illustrated. An explanation of welfare
budgets, the impact of welfare costs on a city, and alternatives to state
financing of welfare costs are provided.

Title: Soybeans: The Wonder Beans
Author: Leonard S. Kenworthy and Laurence Jaeger
Publisher: Messner, 1976
Subject: Farming, manufacturing, production
Reading level: 5th-6th grades

This versatile bean is used to illustrate the process of production from farming
through manufactured products to feeding the starving peoples of the world.
The kinds of capital goods used in soybean production and the importance of
technology are discussed. Instructions are given for raising sprouts at home.

Title: Stores
Author: Alvin Schwartz
Publisher: Macmillan, 1977
Subject: Markets, formation
Reading level: 4th-5th grades

The author describes the economic activities of some 40 different stores found
in a typical town. Ice cream stores, kennels and banks are among the
businesses discussed. An opportunity to study how markets provide information about goods and services and bring buyers and sellers together.

<table>
<thead>
<tr>
<th>Title:</th>
<th>The Story of Coins</th>
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<tbody>
<tr>
<td>Author:</td>
<td>Sam Rosenfeld</td>
</tr>
<tr>
<td>Publisher:</td>
<td>Harry House, 1968 (rev. ed. 1969)</td>
</tr>
<tr>
<td>Subject:</td>
<td>Money</td>
</tr>
<tr>
<td>Reading level:</td>
<td>6th grade</td>
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Although primarily designed to introduce children to the hobby of coin collecting, this book can be used in lessons dealing with barter, money, the criteria for a good medium of exchange, scarcity and inflation. It gives a history of coinage from ancient times to the present, discusses trade and barter, lists the characteristics that a medium of exchange must have if it is to be effective and convenient, explains how scarcity and demand affect the value of a coin, and shows how an increase in the supply of money can cause inflation.

<table>
<thead>
<tr>
<th>Title:</th>
<th>The Story of Corn</th>
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<tbody>
<tr>
<td>Author:</td>
<td>Peter R. Limburg</td>
</tr>
<tr>
<td>Publisher:</td>
<td>Messner, 1971</td>
</tr>
<tr>
<td>Subject:</td>
<td>Resources, production</td>
</tr>
<tr>
<td>Reading level:</td>
<td>4th-5th grades</td>
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The history of corn from its first cultivation to its present-day growth is traced. Current methods of production are described. The use of corn for livestock feed and the processing of special varieties for such products as flour, drugs, adhesives, plastics and oils are pointed out.

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<tr>
<th>Title:</th>
<th>The Story of Offshore Oil</th>
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<tr>
<td>Author:</td>
<td>Harry Edward Neal</td>
</tr>
<tr>
<td>Publisher:</td>
<td>Messner, 1977</td>
</tr>
<tr>
<td>Subject:</td>
<td>Energy, resources, scarcity</td>
</tr>
<tr>
<td>Reading level:</td>
<td>5th-6th grades</td>
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</table>

About the economics of the U.S. and world energy problem. Research and exploration activities of oil companies that are turning to the oceans for new supplies are described. Descriptions of the task of exploring for oil, life on board the offshore, rigs poised between sea and air, and the controversy between environmentalists and oil companies help to introduce the reader to important economic issues and policy actions regarding the use of scarce energy resources.
Title: Street Markets Around the World
Author: Winifred and Cecil Lubell
Publisher: Parents' Magazine, 1974
Subject: Markets, comparative economic systems
Reading level: 3rd-4th grades

A survey of markets throughout the world: permanent and traveling street markets, bazaars, country markets and flea markets. The origins, purposes, activities and services of the various markets are discussed.

Title: Sun Power
Author: Norman F. Smith
Publisher: Coward, McCann & Geoghegan, 1976
Subject: Technology, substitutes, prices
Reading level: 2nd-3rd grades

The sun's role in providing energy for life is explained and illustrated, as are ways of using the sun's energy to provide power for homes, industries, and vehicles. The importance of technology to overcome shortages of other resources is pointed out. The story can be used to indicate that as the price of other energy sources increases, the alternative of using solar sources of energy becomes more attractive.

Title: Supertrains
Author: John Gabriel Navarra
Publisher: Doubleday, 1976
Subject: Transportation, technology
Reading level: 4th-5th grades

A description of current technological advances in rail transportation occurring throughout the world. The importance of transportation is noted and improvements in technology are illustrated. The use of technology in achieving higher living standards and economic efficiency is stressed.

Title: Take Me Out to the Airfield
Author: Robert Quackenbush
Publisher: Parents' Magazine, 1976
Subject: Transportation, technology, invention, innovation
Reading level: 3rd grade

This is a picture book biography of the Wright brothers. It describes how airplanes fly and gives a brief discussion of their importance. It is an excellent source for a discussion of invention, innovation, and the importance of improvements in technology for economic progress.
Title: Three Drops of Water
Author: Sigmund Kalina
Publisher: Lothrop, Lee & Shepard, 1974
Subject: Natural resources, pollution
Reading level: 5th grade

An analysis of the river as a natural resource. The value of the river as a source of drinking water, electrical power and transportation, and the need for conservation of this resource is discussed. The social costs of pollution are illustrated.

Title: Three Little Indians
Author: Gene S. Stuart
Publisher: National Geographic, 1974
Subject: Specialization, division of labor, resource endowments
Reading level: 3rd grade

A description of the organization of three different American Indian societies in diverse geographic areas. The various roles assumed by individuals are described, and the interdependence of the different tasks each performs is stressed. The resource endowment dictates the technology used to acquire the necessities for the various communities as well as customs, diets and play.

Title: Tires and Other Things: Some Heroes of the Automotive Evolution
Author: W. E. Butterworth
Publisher: Doubleday, 1974
Subject: Invention, innovation, entrepreneurship
Reading level: 6th grade

Profiles of people whose ideas and fortitude contributed to the evolution of automobile tires, windshields, batteries, and radios. Important ideas emphasized are the concept of inventions and the significance of innovation—the application of inventions. The role of the entrepreneur in economic progress can be discussed.

Title: The Toothpaste Millionaire
Author: Jean Merrill
Publisher: Houghton Mifflin, 1974
Subject: Entrepreneurship, free enterprise, economic freedom
Reading level: 4th through 6th grades

A sixth-grader is disgusted with the high cost of toothpaste and decides to make his own. This is a story of how to succeed in business and an explication
of free enterprise in the marketplace. The material lends itself to a discussion of entrepreneurship and a presentation of economic progress as a result of individuals' being free to find a more efficient way of producing goods and services.

<table>
<thead>
<tr>
<th>Title</th>
<th>Trade: The World's Life Blood</th>
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<tbody>
<tr>
<td>Author</td>
<td>Adrian A. Paradis</td>
</tr>
<tr>
<td>Publisher</td>
<td>Messner, 1969</td>
</tr>
<tr>
<td>Subject</td>
<td>International trade</td>
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<tr>
<td>Reading level</td>
<td>6th grade</td>
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The history of trade is traced, starting with the idea of barter that developed within a small tribe living near the eastern shore of the Mediterranean Sea. The concept of specialization as the basis for trade and the economic problems that develop in world trade are examined. As they read this story, children may come to understand that what a country can produce efficiently depends on the quality and availability of productive resources which are distributed unevenly around the world, thus creating the basis for specialization and trade. The existence of different monetary systems and of artificial trade barriers such as tariffs are introduced as special problems in world trade.

<table>
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<tr>
<th>Title</th>
<th>Trail of Apple Blossoms</th>
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<tr>
<td>Author</td>
<td>Irene Hunt</td>
</tr>
<tr>
<td>Publisher</td>
<td>Follett, 1968</td>
</tr>
<tr>
<td>Subject</td>
<td>Economics, barter</td>
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<tr>
<td>Reading level</td>
<td>6th grade</td>
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</table>

Johnny Appleseed's legendary travels are used to explain both the concept of market transactions through barter exchange (apple seeds planted in exchange for cornmeal) and the notion of an externality (the apple trees grew and flourished, providing food and scenic beauty for people who had no part in the original transaction). The story provides background information to help students to understand that our system of specialized production and of buying and selling goods in markets requires the use of money.

<table>
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<tr>
<th>Title</th>
<th>Train Cargo</th>
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<tbody>
<tr>
<td>Author</td>
<td>June Behrens</td>
</tr>
<tr>
<td>Publisher</td>
<td>Children's Press, 1974</td>
</tr>
<tr>
<td>Subject</td>
<td>Transportation, labor</td>
</tr>
<tr>
<td>Reading level</td>
<td>3rd-5th grades</td>
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</table>

An explanation of the role of railroads as cargo carriers. Various kinds of cargo and types of rail cars and their functions are introduced. The rail terminal process is covered and key train jobs are briefly discussed. The
The importance of transportation of goods and material in a modern society is also illustrated.

Title: The True Book of Automobiles
Author: Madelyn and Norman Carlisle
Publisher: Children's Press, 1965
Subject: Mass production, economic growth
Reading level: 3rd-4th grades

The operation of the automobile industry is studied as an example of mass production using assembly line techniques. The impact of the assembly line procedures on industrial output in general is noted. The interrelated nature of the economic system taken as a whole is explored through an examination of the impact of the automobile on everyday life. The story includes a commentary on the future of the automobile in our American society.

Title: The True Book of Money
Author: Benjamin Elkin
Publisher: Children's Press, 1960
Subject: Money
Reading level: Primary grades

The main emphasis is on the use of money as a medium of exchange, which is compared at length to exchange through barter. The inconvenience and complexities of a barter economy are stressed. The evolution of money from objects having intrinsic value (such as skins and pelts) through metallic coins to fiat currency is traced in a cursory fashion. A description is also provided of the different types of money used in the American economy, including the operation of checking and savings accounts.

Title: Tugboat
Author: David Plowden
Publisher: Macmillan, 1976
Subject: Labor, international trade
Reading level: 4th-6th grades

This word and picture book presents a day in the life of a harbor tug. Illustrations depict shipping activities at the Port of New York. The activity of the port may be used to introduce the young reader to the amount and importance of trade between countries, especially the advantages of international trade and exchange. The concepts of specialization and comparative advantage can also be presented and discussed.
Title: The Tutti-Frutti Case
Author: Harry Allard
Publisher: Prentice-Hall, 1975
Subject: Business, production, government
Reading level: 3rd-4th grades

An explanation of how government intervenes in the private sector of the economy with regulations and controls to improve upon the results produced by the free play of market forces. Children can be led to understand the ways in which government influences the allocation of resources to determine what and how much will be produced, how it will be produced, and how it will be shared or used. The important role government plays in a mixed economy is stressed.

Title: Very Important People in Food Services
Author: Dorothy Freeman, Margaret Westover and Wilma Willis
Publisher: Children's Press, 1976
Subject: Production
Reading level: 6th grade

All types of jobs connected with food services, including those of meat cutter, produce clerk, cashier, dishwasher and restaurant manager are introduced. The concepts of specialization and division of labor are illustrated. The functions of middlemen and the different methods of delivering a commodity to consumers can be pointed out.

Title: Very Important People Who Work with Recreation Vehicles
Author: Dorothy R. Freeman
Publisher: Children's Press, 1973
Subject: Specialization, interdependence, transportation
Reading level: 6th grade

A discussion of the jobs of people who make, sell, repair, and deal in other ways with bicycles, motorcycles, snowmobiles, campers, and other recreational vehicles. The concepts of specialization, division of labor, and interdependence among the different work units within a business firm are introduced.

Title: You Can't Take Twenty Dogs on a Date
Author: Betty Cavanna
Publisher: Westminster, 1977
Subject: Economic wants, money
Reading level: 4th through 6th grades

Students may gain some knowledge of the sources of personal income and how income is determined in a market system. The rewards people receive for
contributing their labor, savings, and intellectual and entrepreneurial skill to the productive process are illustrated when a young college girl opens a summer boarding kennel and earns money on her own. The book helps to explain the important forces in a market which establish the value of a person's service and influence income distribution.

Title: You Can Work in the Communications Industry
Author: Betty W. Dietz
Publisher: John Day, 1920
Subject: Specialization, interdependence
Reading level: 6th grade

The daily operations of different communications media are described. Through an analysis of the different jobs required in providing the services of the various media to the consumer the notion of specialization through division of labor and the concept of interdependence among different work units within a business firm are introduced. The advantages (increased productivity) and consequences (interdependence) of specialization are also noted.

Title: Your Changing City
Author: Monroe Schere
Publisher: Prentice-Hall, 1969
Subject: Economics of the city
Reading level: 4th-5th grades

The economic and social advantages (and disadvantages) of population concentration in large cities are explored. The increasingly rapid trend toward urbanization is described as are the growing difficulties cities face in trying to provide essential social services for their citizens. The concept of scarcity is illustrated and the process of deciding how to use productive resources when faced with alternative possibilities is explained.

Title: We Can't Afford It
Author: Sandy and Martin Hintz
Publisher: Children's Press, 1977
Subject: Needs, wants, substitutes
Reading level: 2nd grade

About a young girl who, once she finds a bicycle her parents can't afford, learns that ingenuity and imagination can substitute for money income. The ideas presented can be used to distinguish wants from needs; to discuss the concepts of scarcity, substitutes and elasticity, and to explain how quantity purchased changes as price varies.
Title: Westward by Canal
Author: Ruth Franchere
Publisher: Macmillan, 1972
Subject: Economic development, U.S. economic history
Reading level: 6th grade

An account of the beginning of the canal era. The author describes the construction of canals, the people who initiated the plans, those who took part in the digging, and the life around the waterways. The importance of low-cost transportation for economic development and the capital investment required for economic growth can be discussed.

Title: We Visit the Farm
Author: Bruce Wannamaker
Publisher: Children's Press, 1976
Subject: Agriculture, stages of production
Reading level: 3rd grade

A story about a class visiting a farm is used to describe how livestock and poultry are raised, grains grown, and cows milked, as well as how milk is prepared for the dairy. A discussion of why a farmer produces certain things and not others can be undertaken. The function of price as a resource allocator can be demonstrated through a diagram showing the circular flow of finished goods and services, productive resources, and money payments.

Title: What Can She Be: A Lawyer
Author: Gloria and Esther Goldreich
Publisher: Lothrop, Lee & Shepard, 1973
Subject: Labor, job specialization
Reading level: 6th grade

This book describes the activities of a woman who helps people with all kinds of legal problems. The importance of the law in economic transactions is discussed. Concept of rights and equity are presented.

Title: What Can You Do Without a Place to Play
Author: Kathryn Hitte
Publisher: Parents' Magazine, 1971
Subject: Needs, wants, substitutes
Reading level: 3rd-4th grades

About a young boy who moves into an apartment building and finds new friends, but no playground. Although the boy and his friends constantly complain about the need for a place to play, they find ample substitute
locations for leisure-time activities. The economic concepts of needs, wants and substitutes can be explained.

Title: Whatever Happened to the Baxter Place?
Author: Pat Ross
Publisher: Pantheon, 1976
Subject: Urbanization, resources, scarcity
Reading level: 3rd-4th grades

About a farm family that begins to sell its land piece by piece as urbanization moves further into the country. The story can be used to emphasize the effect increases in population have on land use. The function of the price system in allocating resources and the problems associated with the conversion of land from agricultural to other uses are discussed.

Title: What Happens to Garbage?
Author: Rona Beame
Publisher: Messner, 1975
Subject: Resources, technology, recycling
Reading level: 4th-5th grades

An explanation of what happens to garbage and refuse in New York City as it is moved from curbside to incinerator, land-fill areas, and recycling plants. The point stressed is that recycling of garbage will become more important as the price of "new" resources increases. The material can be used to emphasize the problem of waste and to point out that with proper technology many of our resources can be reused.

Title: What Happens When You Put Money in the Bank
Author: Arthur Shay
Publisher: Reilly & Lee, 1967
Subject: Money and banking
Reading level: Primary grades

The role of money as a store of value and the concept of money as an asset are examined through the vehicle of two children's decision to deposit their personal savings in a savings account. The operations of a savings bank are discussed in some detail and it is explained that a bank can pay interest to its depositors because the bank invests the money in productive activities elsewhere. Considerable pictorial material is provided on both the banking operations themselves and the type of investments made by the bank with its depositors' money.
Title: What Happens When You Spend Money
Author: Arthur Shay
Publisher: Reilly & Lee, 1970
Subject: Money, consumption
Reading level: 1st-2nd grades

The process of consumption and the people who satisfy their wants for goods and services are described in this picture book. Relationships between productive resources and finished products and the money incomes of households are observed through a family shopping trip. The story helps to explain why some wants are individual in nature while others are collective, such as a family's home.

Title: What Is Money?
Author: Carol Barkin and Elizabeth James
Publisher: Children's Press, 1977
Subject: Money, personal finance
Reading-level: Kindergarten-1st grade

This is the first in a series of three books dealing with various aspects of money at different reading and maturity levels. The concept of money is defined and its major functions, i.e., as a medium of exchange and a store of value, are pointed out. The author suggests ways in which young people can earn and spend money income. Companion volumes by the same authors are Understanding Money and Managing Your Money.

Title: Where Things We Use Come From
Author: Shirley, Roy and Robert Chilton
Publisher: Children's Press, 1970
Subject: Stages of production, scarcity
Reading level: 2nd-3rd grades

Everyday products are traced from the retail distributor and the manufacturer to their natural source. A description of surplus, scarcity, and the importance of conservation of natural resources is included. Class discussion can be extended to the concept of the circular flow of income.

Title: Whistler in the Mist
Author: Rosalie K. Fry
Publisher: Farrar, Straus & Giroux, 1968
Subject: Comparative economics
Reading level: 6th grade

The economy of Wales is discussed with particular attention to ways in which Welsh social and economic activities differ from those of the United States.
starting point is provided for comparing and understanding different economic systems. Children can be led to understand that all societies face the same central economic problem—deciding how to use scarce resources—but that throughout history different societies have approached the problem in different ways.

Title: The White Archer—An Eskimo Legend
Author: James Houston
Publisher: Harcourt, Brace & World, 1967
Subject: Economic systems
Reading level: 6th grade

The Eskimo society described in this story provides an example of a simple economic system. In such a system, markets may not exist, but decisions must still be made by the members of the society concerning allocation of scarce resources (such as labor), given the available methods of production. The Eskimo techniques of handicraft production, described in the story, can be used to explain the concept of division and specialization of labor.

Title: Winter on Her Own
Author: Elizabeth Howard
Publisher: Morrow, 1968
Subject: Supply and demand
Reading level: 6th grade

The operation of a tinsmith's shop is presented as an example of handicraft production in a pre-Industrial Revolution setting. The operation of the market forces of supply and demand are illustrated in the process by which the tinsmith makes his pricing decisions. The story serves to demonstrate how price is established through changing demand and supply conditions.

Title: The Wonderful World of Paper
Author: Angelo Cohn
Publisher: Abelard-Schuman, 1967
Subject: Manufacturing, production, distribution
Reading level: 6th grade

The history of the manufacture and use of paper is explained in this story, with emphasis being placed on the role of research and technological development in finding new and diverse uses for paper products. The papermaking process is described, illustrating how the application of labor and capital to wood increases its social value and versatility. The story emphasizes the importance of technological progress to increased productivity.
Title: The Wump World
Author: Bill Peet
Publisher: Houghton Mifflin, 1970
Subject: Pollution
Reading level: 6th grade

The importance to society of finding a solution to the problem of pollution is illustrated. It is explained that if people cannot find ways to control the emission of pollutants, then the environment may deteriorate to a point where it can no longer be restored to a livable condition. Reference is made to the economic role of government in enforcing pollution control standards.
Part III

Research in Economic Education at the Elementary Level

Introduction

Aside from one study published in 1942 and three in the 1950s all research at the elementary school level has been done during the past 17 years. Most of it can be categorized as evaluation or experimental research. Thus, one of the great needs at this level is for fact-finding studies. It is impossible to make even an educated guess as to the number or percentage of schools which provide some sort of economics instruction for elementary school pupils. Yet, evaluation studies show that children can learn some basic economic concepts and that economics projects can be enjoyable experiences which enrich the elementary curriculum. Several key studies are summarized below.

The earliest studies pointed to certain deficiencies in economic education at the elementary level. Ruth Gavian (Education for Economic Competence in Grades I to VI. New York: Teachers College, Columbia University, 1942) noted that the typical topics taught in the 1930s were thrift, conservation, business terms and practices, occupational orientation, selecting and using consumer goods, and various social-economic problems. A doctoral study by Louis C. Narisse, completed in 1952 at Teachers College (Education for Business-Economic Concepts in Elementary Schools), revealed that little had changed, as teachers continued to stress thrift, good consumer habits and conservation. He further concluded that the teachers were deficient in economic education, and he recommended that teacher-training institutions provide more adequate instruction in economics.

It was probably assumed during the period covered by these studies that children were not capable of learning economic concepts. In effect, this was challenged by Garney L. Darrin (Economics in the Elementary School Curriculum: A Study of the District of Columbia Laboratory Schools, Ed.D. dissertation, University of Maryland, 1958). Twenty-eight economic concepts were incorporated into the curriculum from kindergarten through sixth grade. The extent to which the pupils were capable of learning economics was determined by evaluations included in standardized work sheets used by the 47 participating teachers. Some of the concepts were the profit motive, distribution of income, economic growth, the price system, capital formation, specialization, division of labor, international trade, and money and banking. It was found that teaching effectiveness varied with grade level. As might be expected, the higher the grade level, the better the understanding of the concept. Darrin noted that 19 concepts were successfully taught in all the grades, and concluded that more economics than was currently being taught could be included in the elementary school. Better teaching aids were needed, however.

Thanks largely to Professor Lawrence Senesh of Purdue University (now at...
the University of Colorado in Boulder), those teaching aids were forthcoming. The so-called Senesh materials were soon widely adopted and engendered further research. William Jeffersds' "A Comparison of Two Methods of Teaching Economics in Grade One, Ed.D. dissertation, University of California at Berkeley, 1966) found that children using the Senesh materials had no advantage over those not using them, in terms of scores on the Elementary Economics Test (Form A), and on the Lee Clark Reading Readiness Test. One of the three pupil groups had used Senesh's Our Working World packaged materials. A second group used them only as resource materials. The third group received regular instruction in the same concepts covered in the materials. The result of this study revealed no significant differences among the three groups.

On the other hand, a group of educators in the Montclair, New Jersey public schools concluded that pupils using the Senesh materials were "significantly better" than those not using them. A structured interview test was developed and used with a random sample of pupils from the experimental and the control classes. The children were interviewed, and their responses were recorded on audiotape. The taped conversations were typewritten and evaluated by judges, who concluded that the classes using Senesh materials were superior. Obviously, there were different variables, other than the materials being used, in the Jeffersd study as compared with those in the Montclair project. Perhaps the pupils and teachers in the two investigations differed in background and ability. The Montclair teachers had received special instruction to help them to develop insights about the concepts taught while teachers in the Jeffersd study received no formal training. In addition, the Montclair teachers were visited in their classrooms by the project coordinator, who offered suggestions and apprised them of available materials and aids.

The need for standardized tests at the elementary level soon became apparent. One of the earliest efforts to construct a test for young children was made by Helen F. Robinson (Learning Economic Concepts in the Kindergarten, Ed.D. dissertation, Columbia University, 1963). Although Senesh's material had not yet been published by Science Research Associates, his work was becoming known. Drawing upon Senesh's early writings and upon the well-known report of the National Task Force on Economic Education, Robinson devised a test for kindergarten children who were being taught economic concepts. Experimental and control groups of equal size were given a pretest and a posttest made up of objects and pictures which could be sorted into categories demonstrating the concepts to be tested. The children were tested on an individual basis and were asked to define the concepts and explain why they sorted the objects as they did. The difference between groups was found to be statistically significant. Unfortunately, Robinson's test is probably not reliable and does not adequately sample the content of today's primary level economics programs. Robinson's pioneering effort, however, did establish that certain economic concepts can be taught to some kindergarten children. We are still left, then, without a satisfactory test for use in kindergarten and first grade, and we still need to know much more about the concepts that children in the earliest primary grades can learn.

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1. The Montclair study was not published, but was made available by the project coordinator, Evelyn Foote.
Another step in primary-school test development was taken by Sol Spears (Concept Learning in Economics under Three Experimental Curricula, Ed.D. dissertation, University of California at Los Angeles, 1967). His study was designed to develop a test for first-grade use and to evaluate the effectiveness of three experimental and one control programs. An objective test was constructed and validated by a jury of economists. Four intact first-grade classrooms were chosen for the study, with the classes randomly assigned to the various instructional programs. Program I incorporated new economics objectives and teaching resources into the existing first-grade social studies curriculum. Program II was the pilot Developmental Economic Education Program (DEEP) of the Joint Council on Economic Education. Program III used the Senesh materials. The control program was simply the regular social studies curriculum of the Culver City, California, school district. Spears administered pretests and posttests and found that the experimental groups did significantly better than the control group, but that there was no significant difference between pupils in any of the three experimental classes, that is, one experimental technique appeared to be as good as another. He also noted that children from middle-level socioeconomic backgrounds scored significantly higher than those from relatively low socioeconomic levels. Spears categorized his test items in accordance with Bloom's Taxonomy of Educational Objectives and found that the experimental pupils did significantly better than the controls on knowledge items. On application items, however, there was no significant difference. One conclusion, then, was that first graders can learn some basic economic concepts if exposed to appropriate instructional strategies and materials.

Other researchers have not been entirely satisfied with the Spears test and continue to question the feasibility of testing knowledge of abstract economic concepts on the part of children who cannot yet read. After the Senesh materials had been obtained for use in 19 Salt Lake City schools during the 1965-66 school year, James P. Shaver and A. Guy Larkins of Utah State University prepared a test to evaluate the effectiveness of the materials with economically deprived first and second-grade pupils. Initially, they wrote 250 items to test the major concepts stressed in the materials, but selected only 64 for final use. Multiple-choice items confused the children, so a "yes-or-no" format was adopted. Finding that young children tend to shout the answers when questions are read to them, Shaver and Larkins changed all interrogative items to a declarative form. All items were to be read to the pupils so that reading ability would not be a factor. The result was the Primary Economics Test—First Grade, or PET-1. Pupils using the Senesh materials were compared with those not using them. Unfortunately, it was not possible to administer a pretest because the materials had already been introduced. Another weakness was that the study was based upon the use of the materials for less than a year, whereas the ideal situation involves yearlong exposure. The Test of General Ability (Science Research Associates) was administered to adjust group means for differences in scholastic aptitude. Shaver and Larkins concluded that pupils using the Senesh materials did achieve significantly higher scores on PET-1.

Shaver and Larkins recognized that there were problems with their test. In a "yes-or-no" test, young children are inclined to mark "yes" when they are guessing, for example. Thus, Larkins decided to devote more research to test
development. He finally settled on a "yes-or-no" test with matched-pairs scoring. This test requires the writing of "reversed items" for each concept or fact being evaluated. For each "yes" item there must be a "no" item testing the same concept. The pupil must respond correctly to both items. In addition, Larkins included some "all no" items and a multiple-choice picture test.

Pupils from 14 schools were selected for the experimental and control groups. The "yes-or-no" test contained over 70 items based upon Senesh's first-grade material. Children were randomly selected from 43 classes in Utah schools. The Test of General Ability showed that the random selection had produced groups of similar abilities. Only one of the tests was used with these children. In order to compare all the tests, Larkins set up a second study in which pupils from two Utah school districts and one Indiana district were involved. It was found that first graders could learn at least some of the content of the Senesh material and that mean scores for children using the material were significantly higher than for those not using it. The concepts were not too difficult for first graders, and there were appropriate concepts for the gifted, average and slow pupils. Larkins did not find that the so-called optimal learning environment produced better results, but one should not generalize from this conclusion because of the limitations in the sample tested. The matched-pairs technique was found to be better than a simple "yes-or-no" or "all no" test. Larkins did not recommend the use of picture tests because they are hard to prepare and some concepts cannot be pictured.

Orus R. Sutton (Graded Economic Concepts for Use in the Elementary School, Ed.D. dissertation, University of Tennessee, 1967), selected 100 economic concepts and asked supervisors and elementary teachers to indicate whether or not they could be learned by elementary pupils. The 33 concepts chosen by the educators for use in the primary grades appear to have been covered in the Senesh materials. An additional 42 concepts were chosen as being suitable for intermediate-level pupils. The respondents thought that seventh and eighth graders could understand such sophisticated concepts as the balance of payments. No testing was done, however.

In the late 1960s Richard B. McKenzie constructed a test to measure the economic literacy of pupils in grades four and seven (The Economic Literacy of Pupils in the Elementary Grades: Radford, Va., Radford College, 1969). Pupils in one Virginia school system were tested with this 25-item instrument. Pupils at both grade levels did understand many economic concepts, although they also had many misconceptions about our economy. The seventh graders did better than the fourth graders (as expected), and the children of professional persons did better than those of nonprofessionals. McKenzie concluded that even without formal economics instruction, significant improvements can occur between grades four and seven and that "economics can be taught in the elementary grades." The pupils understood concepts relating to profit maximization; supply and demand, capital, productivity and even the cross-elasticity effect. They also had some very unrealistic notions, however. The McKenzie test does not appear to have been used outside from this one project involving 193 fourth graders and 218 seventh-grade children.

Efforts at developing a suitable test for use in the primary grades culminated in the publication of the Primary Test of Economic Understanding, or PTEU, by
Donald Davison and John Kilgore at the University of Iowa (New York: JCEE, 1971). After studying the work of Spears, Shaver and Larkins, Davison and Kilgore chose the "yes-no, matched-pair" format for their 64-item (32 matched pairs) test. These items were selected from among the 138 originally written and tried with pupils. About 500 second graders from the Des Moines school system were selected to serve as experimental and control subjects. Intact classes were randomly assigned. One experimental group used Davison and Kilgore's The Child's World of Choices (Iowa City; University of Iowa, 1968) along with the accompanying teacher's guide and student activity book. A second experimental group used the same materials, but their teachers received special in-service training as well. The control groups continued with their regular social studies program. In all three groups there were classes made up of children of low socioeconomic backgrounds (designated as Target Area Schools) and of others who were not categorized as economically, socially and culturally deprived. All pupils took the Test of General Ability (TOGA) so that differences in ability levels could be identified. The PTEU was administered as a pretest and then again after five weeks as a posttest.

Both experimental treatments were found to be more effective than the control method, but the two treatments appeared to be about equally effective, that is, the in-service training did not seem to add anything. In all groups the nontarget pupils achieved higher change scores than the target (low socioeconomic) children. There was a very low correlation between scores on the PTEU and the pupils' age and sex. The PTEU was also found to be more closely related to information, as measured by the TOGA, than to reasoning. When scores were adjusted for differences in pupil ability as measured by the TOGA there was no significant difference between the target and nontarget pupils. The child's score on the PTEU pretest appeared to be the best predictor of posttest achievement, but about 32 percent of the posttest score could be attributed to the pupil's ability as measured by the TOGA. The conclusions were that young children can learn some economic concepts and that there is a "close relationship... between materials provided for teachers and students and pupil growth in economic understanding" (Davison and Kilgore, "A Model for Evaluating the Effectiveness of Economic Education in Primary Grades," Journal of Economic Education, Fall 1971). In later research, the PTEU has been used with third and fourth graders as well as with second graders. It appears to be a useful test, even though it was geared largely to The Child's World of Choices, and it can be used to evaluate elementary-school economic programs and materials in general as long as they cover the same concepts it does.

One disturbing outcome of the Davison-Kilgore study was the finding that in-service training appeared to make no difference. This seemed to suggest that the large amounts of time, effort, and money devoted to workshops, in-service courses, and institutes for teachers were being wasted. Is it enough to give teachers effective materials without training in economic education? To answer this question (among others), the Joint Council on Economic Education in 1972 designed a complex evaluation study that eventually resulted in usable data from 75 different classrooms in 24 communities in various parts of the United States. A total of 34 experimental and 45 control teachers participated, along with nearly 2,000 pupils.
All the experimental teachers had attended summer workshops as recipients of Sears-Roebuck Foundation fellowships and had been trained both in basic economics and in methods of teaching it at their grade levels. An effort was made to match the control teachers with the experimental teachers, so that they would be of the same sex and about the same in age and teaching experience. The control teachers had not attended economic education workshops, and most had had no formal courses in economics. Intact classes were matched by grade level, geographic area, and socioeconomic status, that is, the control class would be as much like the experimental class as possible, but not in the same school.

Early in the fall semester of 1972, pupils in second, third and fourth grade took the PTEU and the appropriate form of the TOGA. Proctors were hired so that test administration would be uniform and so that the teachers of the experimental and control groups would not know enough about the PTEU to "teach to the test." Fifth- and sixth-grade pupils took the Test of Elementary Economics developed by the West Springfield, Massachusetts, school system. After teachers completed their units in economics (or toward the end of the school year in the case of those who integrated economics into the curriculum throughout), the economics tests were again administered as posttests. Change scores were computed for each pupil, and mean pretest, mean posttest, and mean TOGA scores were computed for each class. Mean change scores were adjusted to account for differences in pupil ability as measured by the TOGA. The possible impact of different textbook materials being used by the pupils was also taken into account where possible.

Because the teachers had attended different workshops, and because the workshops differed in length, content and approach, separate analyses were made for each workshop. Teachers who had attended the Des Moines workshop accounted for about half the pupil and teacher population involved, and presented the best situation from the point of view of control. The results in Des Moines indicated that pupils studying under workshop teachers learned significantly more than similar pupils, using the same materials, who were taught by teachers with similar backgrounds but without the workshop experience. In seven of the other eight workshop groups; the pupils of the workshop teachers learned more than similar pupils studying under teachers who had not attended workshops. Although the experimental teachers had not been selected at random (a convenience sample had to be used), they appear to have been representative of the entire group of fellowship recipients, at least as measured by the Test of Economic Understanding (Science Research Associates). The mean posttest score and standard deviation for the selected experimental teachers were practically identical with the mean posttest score and standard deviation for the fellowship recipients as a whole. It is possible, of course, that the superior results obtained by the workshop teachers are accounted for by motivation or some other factor not considered in the study, but it is probably safe to conclude that in most cases the workshop training did have an impact on the pupils as well as the teachers (see An Evaluation of the Sears-Roebuck Foundation Fellowship Program for Elementary School Teachers. New York: Joint Council on Economic Education, 1973).

Several studies have been made at the Industrial Relations Center (IRC) of the University of Chicago, regarding their economics programs for grades four, five and six. One study was to test the efficacy of their Elementary School Economics
A (ESE) program for lower socioeconomic level children (William D. Rader et al., Results of the Evaluation Study on the Elementary School Economics Conducted in Pontiac, Michigan. Chicago: Industrial Relations Center, n.d.). The ESE programs for grades four and five were designed to be completed in 25 to 30 hours. Two multiple-choice tests were developed for each program, with 27 items in the fourth-grade tests and 24 in the fifth-grade ones. Children of lower-level socioeconomic backgrounds in Pontiac, Michigan, were compared with middle-class pupils in Vigo County, Indiana. Pretests were alternately distributed so that half of each class received one form and half received the other form. Experimental groups at both grade levels made significant gains in economic knowledge. The fourth-grade control group made no progress at all, while the fifth-grade control pupils gained but not to the extent achieved by the experimental children. Experimental groups in both Pontiac and Vigo County made significant gains, but the lower socioeconomic groups (Pontiac) achieved lower pretest and posttest scores than the middle-income pupils.

Another IRC study dealt with transfer and retention (William D. Rader et al., Results of the Evaluation Study Conducted in the Vigo County Public Schools on the Elementary School Economics Programs. Chicago: Industrial Relations Center, 1967). One aim was to find out if exposure to the fourth-grade program affected the pupils when they later took the fifth-grade program; another was to ascertain how well the material is remembered over a year. Two groups were formed to measure the transfer effect, one being exposed to the fourth-grade program and the other not. Pretest means did not differ significantly, but the experimental group did much better than the control group on the posttest. About a year later, both took the fifth-grade pretest, and the experimental group achieved a significantly higher mean. Then both had the fifth-grade ESE program and, after six weeks, took the fifth-grade posttest. Their posttest scores were practically identical. On the question of retention, both fourth- and fifth-grade programs were considered. There was no significant difference between mean scores of control and experimental groups. The experimental pupils achieved a much higher posttest mean, but the controls—who had not been exposed to the ESE program—did show improvement. A year later, both fourth-grade groups were tested again. The experimental group's mean score declined, suggesting that they forgot some of their learning, but the control group's mean score increased. Since the control pupils had not had the ESE program, the researchers attributed the gain to the acquisition of new learnings and maturation of reading skills. Yet, the experimental group's mean score was still significantly higher than the control group's. The fifth graders also started at the same level of knowledge, and the experimental group scored a large increase while the control group's gain was modest. A year later, the groups were tested again, with results similar to those found for the fourth-grade pupils. Retention of the fifth-grade material was greater than that of the fourth-grade material, however.

IRC studies have also concentrated on particular topics. Testing control and experimental groups in Oak Ridge, Tennessee, researchers found that fourth and fifth graders can understand the concepts of specialization, the effects of specialization on the growth of cities, and the related processes of marketing and production (see Sharon L. Ritt, "An Experimental Study of the Capacity of Fourth- and
Fifth-Grade Children to Understand Selected Economic Concepts," in Howard A. 
Sulkin and Chana R. Friedman, Eds., Research in Elementary School Economics: 
Occasional Paper Number 30, Chicago, Industrial Relations Center, 1969.

The IRC's sixth-grade program was designed to be a self-contained entity 
rather than a continuation of the fourth- and fifth-grade programs. Nevertheless, a 
study was made to see if exposure to economic instruction in fourth and fifth grades 
influences pupils' understanding of concepts when they reach sixth grade. A test 
was administered to 1,326 pupils in Flint, Michigan, which covered such topics as 
works, money, consumption, saving, production and marketing. About half 
the pupils had been in the ESE fourth- and fifth-grade programs. This did not seem 
to influence or relate to economic understanding in grade six. Furthermore, no 
evidence was found of the effects of age, sex, or environment on economic 
understanding.

The factor of teacher training was also studied in one IRC research project, 
with somewhat confusing results. This study involved schools in six states. The 
schools were located in high-, middle- and low-income neighborhoods. The IRC's 
21-week Economic Man program was used in the 47 participating classes. Participating 
teachers were divided into three groups: "experienced" teachers, 
"trained" teachers with economic education in-service training, and "non-
trained" teachers with no economic education training. The Otis-Lennon Test of 
Mental Ability was used to measure pupil intelligence, and two economics tests 
were developed for pre- and postuse. The 16 control classes did not use the IRC's 
program. As expected, pupils receiving economics instruction made greater gains 
than the controls. This occurred regardless of socioeconomic level. Surprisingly, 
among the control groups the low-level one made a statistically significant gain, 
while the middle-level group regressed, and the gain of the upper-level group was 
not significant. At the upper socioeconomic level the "experienced" teachers 
achieved significantly better results, while there was no difference in results 
between the "trained" and "nontrained" inexperienced teachers. At the middle 
level there was no significant difference among the three categories of teachers. At 
the low level, both the "experienced" and the "trained" teachers did better than the 
"nontrained." However, teachers with the one-day training did better than the 
experienced teachers. Thus, it seems that the ESE program can be taught even by 
teachers without experience and no special training. Children at all three 
socioeconomic levels profit from the program, but the upper-level pupils learn most.

Some of the research at the elementary-school level has dealt with particular 
instructional techniques. Under the direction of Richard L. Wing, the Board of 
Cooperation in Educational Services of Yorktown Heights, New York, developed 
and tested three computer-based economics games for sixth graders (see The 
Production and Distribution of Three Computer-Based Economics Games for Sixth 
Grade, Yorktown Heights, N.Y.: BOCES, 1967). In the Serfian game the pupil 
plays the role of king of Lagash in 3500 B.C., trying to decide on the best 
allocation of the nation's resources. In the Sierra Leone game the student acts as an 
economist in a developing nation. In the free enterprise game, the pupil 
operates small business in the American economy. The pupil's decisions are fed 
into the computer, which responds immediately with the consequences of those
choices and with challenging new decisions that must be made. Such concepts as the law of diminishing returns, economic growth, opportunity cost, social overhead capital, investment, specialization and exchange, productivity, supply and demand, GNP, fixed and variable costs, and profits are supposed to be learned by playing the games.

Children using the computer were compared with sixth graders being taught the same concepts in the conventional way. In addition to pretests and posttests, the researchers also observed and interviewed the pupils. On the test associated with the simian game the experimental group made significantly greater gain scores. On the Sierra Leone test, however, the control group actually did better, although the difference was not significant. After a lapse of several months the posttests were administered again to determine retention. The control group had remembered more than the experimental group. An item analysis, on the other hand, showed that some concepts were taught more effectively by the games. The experimental group did better on items based on graphical and diagrammatical presentations, while the controls did better on factual items. Note, however, that the control group had spent more time studying the same material. Good readers gained more than poor readers, and bright students learned more from the games than the less gifted. The researchers claimed to have established the technical feasibility of the computer games, and that the pupils enjoyed them and maintained their interest. Within the experimental group, however, the greatest gains were made by those children who had spent the least time at the computer.

B. J. Dooley made a comparison of fourth graders using the simulation game market with a control class being taught by the lecture method. The same teachers taught both classes, and the University of Chicago’s elementary materials were used for both. The same tests employed by Rader were used for pre- and posttests. Although the game did not make significantly higher gain scores, but the pupils who played the game enjoyed the experience more than the control pupils did (B. J. Dooley, A Comparison of the Simulation Game Market and Lecture Method for Teaching Basic Economics Concepts to Fourth Grade Students, Milledgeville, Georgia State College, 1968).

Dean Lapham and Kenneth Light of Ohio University evaluated the pilot introduction of the TV program “Adventure: Economics” in the Columbus City schools. These 15 telecasts of 20 minutes each were designed for intermediate level pupils, with the content based upon Life on Paradise Island by W. H. Wilson and Roman F. Warmke (Glenview, Ill.: Scott, Foresman, 1970). Fourteen schools were drawn at random, and the nine most closely representing the total school populations in racial composition, reading ability and verbal intelligence were chosen for the study. The sixth-grade classes from these schools were then randomly assigned to control and experimental groups. The controls continued with their normal class routine (which included some economics instruction) while the experimental students viewed the TV series. The Test of Elementary Economics (TEE) was used on a posttest-only basis. In an attempt to identify factors associated with the pupils’ economic understanding, multiple regression analysis was used to examine age, sex, reading ability, verbal intelligence, and first-semester social studies grades. Class size, the teacher’s educational level, and his or her performance on the Test of Economic Understanding, course work in economics,
and teaching experience were also taken into account. The experimental group achieved a mean score only slightly higher than that of the control group. Some of the control classes did better than the experimental groups. Sex, verbal intelligence, age, and school attended were major factors influencing pupil achievement in economics. Merely viewing the TV series did not seem to produce a highly significant change in pupil understanding, as measured by the TEE. Finding considerable variation between classrooms, the researchers suggested that there might be influential conditions they had not taken into account.

Marilyn Kourilsky of the University of California at Los Angeles has done research on her "mini-economic system" with third- through sixth-grade pupils. The mini-economy is neither a game or simulation nor a "make-believe" economy set up in the classroom but a real-life social, political and economic structure in which the children make economic decisions as they develop firms and sell goods and services. Economic concepts develop naturally as scarcity becomes evident: a classroom currency is created, production costs are encountered, unequal distribution of wealth emerges, capital must be raised, the need for banks arises, workers must be hired, a government (complete with taxes and civil servants) is formed, businesses succeed or fail, and so on.

Fourteen classes of about 36 pupils per class were randomly assigned to the experimental or the control program, with the Test of Elementary Economics administered along with other instruments developed by Kourilsky and others. Seven experimental teachers received 12 hours of training in the mini-economy model and its implementation, while the seven control teachers were told to teach economics in their usual manner. Both groups then spent about two and one-half hours a week on economics for ten weeks. The posttest-only design of the TEE was used. On the economic concepts test the experimental group achieved significantly higher scores. Five students from each class were randomly selected to take an oral interview test on economic institutions. The responses were recorded and evaluated by judges who were not aware of the experimental variations. On this test, the experimental group again achieved significantly higher scores. All pupils took a locus-of-control test based upon the Intellectual Achievement Responsibility Questionnaire by Crandall, Katkovsky, and Crandall (see Child Development, Vol. 6, Part I (1965); 91-109), but modified by Kourilsky to substitute economics for subject matter of a general nature. This test is designed to assess the degree to which children see themselves as being able to influence the outcome of situations. There was no significant difference between the two groups on this test. Sex was not a significant variable, although in an earlier study Kourilsky found that fourth-grade girls did better than fourth-grade boys in economic understanding, and although many studies have shown that men do better in an introductory college course in economics.

Kourilsky felt that the need-to-know factor probably explains the superiority of the experimental group, since those pupils had to learn many economic concepts to function successfully in a highly competitive classroom economy. She also thought that the experimental children would have done significantly better on the locus-of-control test if they had been exposed to the mini-economy for a longer period. There were many unanticipated positive outcomes, such as "a high sense of business ethics," improved math and language skills, the ability of slow
learners to achieve status, a sense that there was "dignity in any job," and "increased interaction among different ethnic groups." (Marilyn Kourilsky, A Test of an Econo-Social System in Elementary Schools, University of California at Los Angeles, n.d. Also, see Kourilsky, Beyond Simulation: The Mini-Society Approach to Instruction in Economics and Other Social Sciences, Los Angeles, Educational Resource Associates, 1974.)

Summary

It is safe to conclude that the research done in the teaching of economics at the elementary-school level has established that children can indeed learn many basic economic concepts, that a wide variety of instructional materials and techniques can be used effectively, and that learning can be measured fairly precisely. As noted earlier, one of the missing links is a nationwide survey of the extent to which economics is being taught in the elementary schools. Such a survey would be extremely difficult. Elementary teachers often have a great deal of discretion about what they teach and how, at least after they have covered the "essentials" in the curriculum. Thus, an effort to obtain accurate information from state or local education officials would probably not yield very reliable data. School principals and local curriculum coordinators might have a better view of what is being done, but economic-education specialists would actually have to examine classroom practices at first hand to get a truly accurate picture. The teachers-themselves are not always reliable sources of information. They sometimes teach economic concepts without recognizing them as such. Elementary textbooks often contain economic facts and concepts but the teacher does not realize that she/he is dealing with the "dismal science" when those concepts are taught. Conversely, teachers may claim to be teaching economics when they are not really doing so. Textbooks authors sometimes err in denoting as "economics" facts and concepts no economist would accept as being part of the discipline. For example, one project submitted to the Joint Council's Annual Awards Program by an elementary teacher listed as an "economic concept" the statement "There are many different kinds of birds." Although the elementary social studies textbook series have improved greatly over the years in terms of economic content, it is not unusual to find equally ridiculous errors. For an evaluation of elementary level material, see Donald G. Davison, John H. Kilgore, and Larry G. Sgontz, Economics in Social Studies Textbooks: An Evaluation of the Economics and the Teaching Strategies in Social Studies Textbooks. Book One: Elementary Grades (1-6) (New York: Joint Council on Economic Education, 1973). This has been supplemented and updated by the same authors, (Report No. 2, Iowa City, University of Iowa, 1975). Until such time as all elementary-school teachers are required to have instruction in economics and in methods of teaching it (such a requirement exists in Arkansas), the elementary social studies textbook series will be of critical importance in determining the extent to which children learn some basic economics. The readability of current textbooks may also be a problem, as suggested by C. Kenneth Murray ("A Note on the Readability of Economics Content in Elementary Social Studies Textbooks" Journal of Economic Education, fall 1975). Murray states that the reading levels in most books are too high.

Questions will continue to be raised, also, about the adequacy of tests of
economics at the elementary level. Most of the tests were designed for use with a particular program or set of materials. Their usefulness with pupils who are not exposed to those programs and materials can be questioned. The norm data available for some of the tests are not adequate. Some of the instruments were not tried nationwide, but in geographic areas which may not truly represent the national population. Data are needed on the performance of pupils with reading problems, of different socioeconomic backgrounds, from different kinds of areas (urban as opposed to rural, for example), of different intelligence, and so on. The existing tests can be used, however, if the results are interpreted with great care.

The Davison-Kilgore Primary Test of Economic Understanding probably has the greatest universal appeal. It has been used with thousands of students and has relatively good norm data. The authors worked with the Joint Council in developing a master curriculum guide that identifies the facts, concepts and principles suitable for the elementary curriculum (see A Framework for Teaching Economics; described in Part I, above).

Some good work has been done at the elementary-school level. But as the Joint Council's Master Curriculum Guide is distributed, as new materials for use in the elementary grades are created, as more teachers attempt to incorporate economics in the curriculum, as demands for accountability increase, and as problems and conditions in the schools change, the need for more and better research and evaluation will accelerate.
Selected Articles Relating to Economic Education in the Elementary School

Becker, William E., Jr., and Robert W. Reinke, "What Economics Should the Educator Know?" Social Studies, 66 (September 1975), 195-204.

The authors identify, define and clarify a limited number of key economic concepts for elementary and secondary social studies. Suggestions for applying the concepts to a broad spectrum of personal and socioeconomic issues are made. A rationale for teaching economics in grades K through 12 is proposed.


An innovative consumer economics curriculum for elementary grades is described. Suggestions for incorporating basic economic concepts into the curriculum are made and strategies for classroom application are discussed with emphasis on the use of problem-solving and inquiry approaches to teaching.


The timeliness of introducing economics at the elementary level is discussed. The author examines the need for an understanding of basic economic concepts (such as the role of money as a medium of exchange and the operation of the banking system) at all levels of society. Other publications about money as a medium of exchange are noted.


Gaming and simulation techniques in math are used to show how basic economic concepts can be effectively presented in the elementary grades. The concepts of consumer, production, saving, spending and investment are briefly treated to assist teachers in developing classroom activities.


Fifth-grade students are introduced to the causes of inflation through simulation-gaming strategies. The authors demonstrate how the study of economics may be presented in the curriculum to help students to understand social problems.
Activities that promote children’s awareness of consumer economic concepts and issues are described. Suggestions are provided on how elementary teachers can develop problem-solving and mathematical skills through study topics dealing with children as consumers.

In the classroom activities described here, pupils are given an overview of the U.S. banking system. Games, study topics, and group activities are used to teach about money, banks and the economy. The authors explain how money is created and point out the importance of choice-making in deciding how money income is allocated among competing uses.

The importance of an early introduction of pupils to basic economic questions is stressed. The difficulties of such an undertaking are examined to assist teachers in developing guidelines concerning the scope and organization of an economic education program.

Various methods of teaching consumer education in the secondary school are described. Examples of how specific consumer topics can be included in the curriculum by each method are given. Team-teaching, simulation and gaming, and interdisciplinary methods are among the different instructional strategies emphasized.

Basic economic concepts are illustrated by comparing the Canadian and American economies. The article contains detailed descriptions of learning activities for teaching economic concepts and includes an annotated listing of supplementary resource materials on the topic.

Darrin, G. L., "Why We Wear What We Wear When We Wear It," *Grade Teacher*, 85 (February 1968), 124-128, 130.
An examination of production and distribution in the clothing industry is used to develop the student’s understanding of fundamental economic concepts. Primary attention is given to the operations of the forces of supply and demand and to the relationship between the level of industry demand and the level of employment in the industry. Suggestions for classroom activities are also provided.
This article contains descriptions of activities and techniques for teaching economics in the elementary curriculum, including various types of simulations and role-playing exercises. It also contains descriptions of how elementary teachers can develop economic ideas in the classroom.


A plan is offered for infusing the school curriculum with economics from the early grades through college: A conceptual framework of economic education is presented with suggestions for classroom application of basic concepts and practices.

Denny, M. C., "First Grade Economics Based on Division of Labor," Instructor, 76 (January 1967), 67.

Specialization and the division of labor in the adult world are examined through analogy with the division of classroom duties among students. The author summarizes the advantages and disadvantages of specialization, points out the importance of interdependence, and discusses how basic economic ideas can be applied to the elementary social studies curriculum.

"Economics in Primary Grades," School and Society, 92 (October 17, 1964), 284.

Examples are given of classroom activities for teaching basic economic concepts in the primary grades. The concepts of specialization, division of labor and interdependence are applied in a realistic way to the everyday experiences of children. The usefulness of role-playing, and simulations and sociodrama techniques for the teaching of economics is explained.


A rationale is offered for teaching economic ideas and practices at all educational levels. An attempt is made to explain how economics is as much a part of a child's world as that of adults. The primary focus is on the importance of economics for effective citizenship.


An outline is presented of course material to be covered in the elementary grades. The author demonstrates how the study of economics may be integrated into the curriculum to enable students to interpret social studies in the light of economic concepts. Also discussed is the relationship between international trade and historical patterns of colonization.

Suggestions for incorporating consumer awareness into high school civics and government units of instruction are made with special emphasis on values clarification and the needs and experiences of the student. A conceptual framework for consumer economics is discussed and strategies for teaching basic concepts are offered.


This article outlines a curriculum program that seeks to enable young people to understand economic practices of business and industry. Originally conceived at the 1972 National 4-H Congress, the program was expanded to include the participation of many youth organizations. A format of four one-day economics modules is suggested. Businessmen's involvement, local advisory committees, and coordination are important aspects discussed.

"Gingerbread Lesson," *Newsmag. 63 (March 30, 1964), 73:

An activity is described for teaching the concepts of division of labor and specialization and interdependence. The concepts are defined, and specific instructions are given on how to use the activities in the classroom. Some useful criteria for evaluating the effectiveness of the activities are included.


An activity is described for teaching the concepts of scarcity, resources, production, and specialization and division of labor. The construction of a recreation center near a school building is used to illustrate these economic ideas.

Gribling, R., "You Can Teach More Economics Than You Think: Start a Business," *Grade Teacher*, 83 (February 1966), 82, 84, 88, 92, 94, 96.

The management of a real book business financed by the sale of stock is discussed as it relates to the teaching of economic concepts. The article contains specific suggestions on how to use the activity in the classroom and includes an extensive list of materials in economic education.


The organization of a classroom toy store is shown to be a useful vehicle for introducing students to economic concepts such as profit and loss. Also treated is the matter of obtaining loans to initiate a business undertaking. The elementary teacher is introduced to the classroom use of role-playing and simulation exercises.


This article summarizes a discussion between a school principal and a teacher on the role of economics in the elementary curriculum. Several possible
Alternative programs that can be used to increase students’ economic understanding are presented along with suggestions on the use of class projects and audiovisual aids.


A classroom experiment is described that demonstrates how money serves as a medium of exchange and a store of value. A banking system is set up using bottle cap currency to illustrate the operation of financial intermediaries. The article offers a rationale for the use of games in elementary social studies.


Five alternative approaches to teaching economics at the elementary level are presented. Ways in which the study of economics can be incorporated into various areas of the elementary curriculum are described. It is noted that fundamental economic concepts should be introduced in such a fashion that they relate to the student's everyday activities and experiences.


Children learn that economics is part of their everyday life as key concepts are applied to the study of the school. The concepts of needs and wants, opportunity cost, specialization, and consumer goods and services are examined. Suggestions for classroom activities are provided.


The importance of including the study of economics in the elementary curriculum is stressed. Jacobs shows how children’s books and other materials can be used to achieve this end. A useful annotated bibliography of children’s books available for this purpose is presented with a description of the economic concepts illustrated in each book.


A discussion is presented of recent articles on the subject of introducing economics into the elementary curriculum. The use of flow charts and other practical pictorial material to teach economic concepts is examined. It is intended for elementary teachers who might wish to incorporate economic learning in the curriculum.

John, Mary Tyler, "Social Studies: Role Play Into Thinking," *Instructor*, 83 (March 1974), 56.

The importance of role-playing in stimulating analytical thinking is illustrated. Students are assisted in seeking alternatives in the solving of an economic problem.
problem, and the long-range effects of choice-making are considered.

The author argues for the incorporation of economics into the primary-grade social studies program, and contends that an understanding of the market system will enable students better to understand the role of both the individual and the family in society.

An elementary-level economic education program in three parts is proposed. A study of the role of money in society followed by an analysis of production, distribution, business ethics, and consumption choices is explained. The concepts of specialization and division of labor are described as well as trade patterns and transportation costs. An analysis of students' vocational aspirations and the roles their chosen occupations play in the national economy at large are discussed.

Fourth- and fifth-grade students at Bulman Elementary School in Redford, Michigan, learn economic concepts by selling potato chips. Company stocks are sold and part of the profit is invested in a student-run bank that has checking accounts and issues monthly statements.

This author emphasizes the importance of economic education and shows how economics affects everyone in providing a conceptual framework for rational decision-making. Suggestions are offered to assist educators in developing a systematic program for economic learning in the elementary school.

A teacher-guided curriculum called Kinder-Economy is described in which basic economic concepts are introduced to primary-grade youngsters. The program emphasizes decision-making, simulation, and active student participation in dealing with economic ideas related to the real world. The author also reports on an investigation of pupils' mastery of concepts presented in the Kinder-Economy.

The authors describe the results of a study designed to measure the effects of two teacher-training programs in economics for intermediate grades. Attention is given in particular to the impact of two different forms of behavior modification on pupil achievement.

This is a guide to evaluating high school consumer education programs and to obtaining free or inexpensive materials for classroom use. An annotated list of commercially available materials including periodicals, newsletters, books, curriculum guides, and teacher resources, is provided.

Third-grade pupils are introduced to the meaning of inflation and how the value of the dollar is determined. The usefulness of group discussion techniques for teaching economic concepts is explained. Children discover that they are active participants in the economic system.

The importance of presenting all aspects of a controversial economic issue in the classroom is stressed. The main subject is the conflict between economic growth and the quality of life. Different approaches to presenting this study topic to elementary-school children are outlined.

Recent developments in economic education for the primary grades are discussed with emphasis on the results of recent research. Strategies and suggestions for teaching economics are offered to assist curriculum developers in designing programs for the elementary school.

McAllister, A., “Economics for Your Classroom,” Grade Teacher, 82 (December 1964), 68-70.
The strategy of introducing eight-year-olds to economic concepts through discussion of the students’ parents’ occupations is described. Examples of how specific concepts can be introduced by this method are given and the use of games and simulations as instructional techniques is emphasized.

McAllister, A., “Helping Children Understand the Workaday World of Adults,” Grade Teacher, 83 (February 1965), 44-46.
An explanation of the economic role of production is given along with a description of how the market system operates to decide what commodities will be produced, how these goods will be produced, and how much will be produced of each. It is observed that this presentation can be made more effective through the use of classroom demonstrations and tours of business firms.
McAllister, A., "Teaching Profit to Second Graders," *Grade Teacher*, 82 (March 1965), 68-70.

Various classroom techniques for introducing second-graders to the concept of profit are discussed with particular attention to how these can be facilitated by group participation. The article concentrates on the use of various role-playing activities at the elementary level.


The problem of making rational economic choices in seeking the best way to satisfy unlimited wants using limited natural resources is employed to introduce students to a variety of economic concepts. The article contains many suggestions on how to use class participation exercises to teach economic concepts.


This author examines the economic education program used in the Rockford, Illinois, schools. It is noted that although "economic education" is not actually listed as part of the course of study, students are introduced to a wide variety of economic phenomena, many of them through tours of local businesses and financial institutions.


A discussion is provided of a simulation activity developed by a third-grade teacher and designed to introduce children to basic economic concepts. The article contains suggestions for teaching money-management ideas and an explanation of how simulation games can be effectively used in the classroom.


The authors evaluate the treatment of economics content emphasized in high school American history textbooks. Guidelines and suggestions for analyzing the appropriateness and accuracy of economic concepts and principles are provided. The importance of economic education in the teaching of social studies is pointed out.


The author describes an instructional training program in consumer economics for elementary teachers. The importance of introducing consumer economics into the curriculum is discussed and examples of activities for helping children to understand important concepts are presented.

The author explains how questioning techniques can be employed by teachers to clarify and articulate economic ideas children express. Techniques are defined and examples given to assist the teacher in relating children's experiences to the economic world in which they live.


Activities, games, drills, mock stores and banks are suggested as devices to make the learning of economics more pleasurable for pupils. The fundamental ends of economic activities and the concept of a market are introduced in such a way as to make them understandable to primary-school children.


A formation of a hypothetical economy on a desert island is the device used to introduce students to a variety of economic principles including systems of exchange and the operation of a price system. Pre- and posttesting procedures are used to measure students' interest and knowledge.


A discussion of Senesh's curriculum, which utilizes techniques used in economics education to the objectives of educational programs. Of particular interest is the order in which concepts are introduced as the student advances through the program's curriculum.


The authors provide specific guidelines for developing an economic education program for the intermediate grades. Suggestions are offered to assist elementary teachers and curriculum supervisors in revising and adapting existing programs to include economic understandings. The article contains useful criteria for evaluating the existing program and a discussion of alternative designs for incorporating economics.


A suggested list of economic concepts to be introduced at the elementary grade level is presented. The article contains a description of content and an explanation of how economic knowledge can be applied in a realistic way to show children its usefulness. The article is intended for elementary teachers and includes descriptions of learning activities for use in the classroom.
Senesh, L., "Economics of the City," *Graduate Teacher* 81 (December 1963), 30, 79-82.

The concept of the division of labor is presented in a discussion of city living habits. The author also discusses ways of integrating instruction in economics into social studies curricula.


A selection of economic concepts that should be understood by students as proper background for education at the secondary level is proposed and examined. Attention is given in particular to methods by which pictorial material can be used to facilitate presentation of the principles chosen for analysis.


Different concepts of "costs" are discussed, including a treatment of both the notion of opportunity costs and the measurement of monetary cost. Suggestions are made for pictorial presentations to accompany the material examined.


A pictorial presentation to demonstrate the different uses of money is proposed with particular attention to money's role as a medium of exchange. Senesh provides a nontechnical explanation of basic concepts and how they can be applied to the elementary school program.

Senesh, L., "The Ups and Downs of Mr. Boot," *Instructor* 73 (October 1963), 40-41, 47.

The author describes a pictorial presentation to be used in demonstrating the roles played by prices and price changes in a market economy. Prices are shown to be signals of consumers' wishes which act to stimulate (or discourage) the production of particular products.


The concept of efficiency and the problems of production are introduced. Special attention is given to the concept of specialization through division of labor by contrasting individual hand craft techniques and assembly line methods used in mass production.


A discussion of the proposed elementary education program in social studies developed by the University of Minnesota is provided. Emphasis is put on the interdisciplinary nature of the program, of which economics is regarded as an integral part. Problems of design, implementation and evaluation are described.

The author's premise is that elementary-school children can learn fundamental economic ideas related to their experiences. Guidelines for incorporating economics into the curriculum and planning classroom activities are discussed and suggestions are provided for helping students better to understand the economic world in which they live.


The elementary teacher is introduced to the classroom use of computer games and simulations for teaching economic concepts. The author explains the economic ideas emphasized and gives descriptions and uses of several games. The article stresses the importance of using games as a method of instruction.
PART V

Journals and Bulletins


American Libraries. American Library Association, 50 East Huron Street, Chicago, IL 60611.

American Literature. Duke University Press, College Station, Box 6697, Durham, NC 27708.

The Booklist. American Library Association, 50 East Huron Street, Chicago, IL 60611.

Canadian Library Journal. Canadian Library Association, 151 Sparks Street, Ottawa, Ontario, Canada K1P 5E3.


Childhood Education. Association for Childhood Education International, 3615 Wisconsin Avenue NW, Washington, DC 20016.


English Journal. National Council of Teachers of English, 1411 Kenyon Road, Urbana, IL 61801.
PART VI

Professional Organizations


American Library Association, 50 East Huron Street, Chicago, IL 60611.

Association for Childhood Education International, 3615 Wisconsin Avenue NW, Washington, DC 20016.

Catholic Library Association, 461 West Lancaster Avenue, Haverford, PA 19041.

Center for Children's Books, University of Chicago Graduate Library School, Chicago, IL 60637.

Child Study Association of America, 9 East 89th Street, New York, NY 10028.

Children's Book Council, Inc., 175 Fifth Avenue, New York, NY 10010.

Children's Services Division, American Library Association, 50 East Huron Street, Chicago, IL 60611.

International Reading Association, 800 Barksdale Road, Newark, DE 19711.


National Council of Teachers of English, 1111 Kenyon Road, Urbana, IL 61801.

National Education Association, 1201 16th Street NW, Washington, DC 20036.

PART VII

Bibliographies

Some of the books may be out of print. However, they may be available in
school or public libraries.

Adventuring with Books. Citation Press, Division of Scholastic Magazines, 50
West 44th Street, New York, NY 10036.

American Historical Fiction and Biography for Children and Young People.
Scarecrow Press, Inc., Subsidiary of Grolier Inc., 575 Lexington Avenue,
New York, NY 10022.

Best Books for Children. R.R.-Bowker Company, A Xerox Publishing Company,
1180 Avenue of the Americas, New York, NY 10036.

Best-Selling Children's Books. Scarecrow Press, Inc., 575 Lexington Avenue,
New York, NY 10022.

A Book of Children's Literature. Holt, Rinehart & Winston, 383 Madison Avenue,
New York, NY 10017.

Avenue, Bronx, NY 10452.


Association, 50 East Huron Street, Chicago, IL 60611.


Children's Books: Awards and Prizes. Children's Book Council, Inc., 175 Fifth
Avenue, New York, NY 10010.

Children's Book for $1.50 or Less (Good and Inexpensive Books for Children).
Association for Childhood Education International, 3615 Wisconsin Avenue
NW, Washington, DC 20016.

Children's Books in Print (annual). R.R. Bowker Company, 1180 Avenue of the
Americas, New York, NY 10036.

Children's Books of the Year. Child Study Association of America, 9 East 89th
Street, New York, NY 10028.


Children's Catalog. H.W. Wilson Company, 950 University Avenue, Bronx, NY 10452.

Children's Literature. Wofford College Library, Spartanburg, SC 29311.


Elementary School Library Collection. Bow-Dart Foundation, 1609 Memorial Avenue, Williamsport, PA 17701.


A Guide to Non-Sexist Children's Books. Academy Press, 176 Academy Lane, Sonoma, CA 95476.

The Hornbook. Horn Book, Inc., 585 Boylston Street, Boston, MA 02116.


Reading Around the World. International Federation of Library Associations, 12 Vine Court Road, Sevenoaks, Kent, United Kingdom.


Stories--A List of Stories to Tell and to Read Aloud. New York Public Library, Office of Children's Services. Fifth Avenue and 42nd Street, New York, NY 10018.


Stories to Tell. Enoch Pratt Free Library. 400 Cathedral Street. Baltimore, MD 21201.


Subject and Title Index to Short Stories for Children. American Library Association, 50 East Huron Street. Chicago, IL 60611.

Subject Collections in Children's Literature. R.R. Bowker Company. 1180 Avenue of the Americas. New York, NY 10036.


Subject Index to Books for Primary Grades. American Library Association, 50 East Huron Street. Chicago, IL 60611.


PART VIII

Names and Addresses of Publishers

Abelard-Schuman
666 Fifth Avenue
New York, NY 10019

Abingdon Press
201 8th Avenue South
Nashville, TN 37202

Addison-Wesley Publishing Co.
Inc.
J. B. Lippincott
Reading, MA 01867

American Heritage Publishing Co.
Inc.
10 Rockefeller Plaza
New York, NY 10020

Atheneum Publishers
122 East 42nd Street.
New York, NY 10017

Benecio Press
10300 West Roosevelt Road
Westchester, IL 60155

Carnegie (Avon Books)
959 8th Avenue
New York, NY 10010

Carolrhoda Books, Inc.
241 First Avenue North
Minneapolis, MN 55401

Children's Press, Inc.
1224 West Van Buren Street
Chicago, IL 60607

Child's World
5556 Weatherstone Lane
Elgin, IL 60120

Coward, McCann & Geoghegan,
Inc.
200 Madison Avenue
New York, NY 10016

Crowell-Collier Press
Imprint of Macmillan Publishing Co., Inc.
866 Third Avenue
New York, NY 10022

Dial Press
1 Dag Hammarskjold Plaza
(245 East 47th Street)
New York, NY 10017

Doubleday & Co., Inc.
245 Park Avenue
New York, NY 10017

Elk Grove Books
Div. of Children's Press, Inc.
1224 West Van Buren Street
Chicago, IL 60607

Farrar, Straus & Giroux, Inc.
19, Union Square West
New York, NY 10003

Follett Corporation
1010 West Washington Boulevard
Chicago, IL 60607
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<th>Publisher</th>
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<td>Harcourt Brace Jovanovich,  Inc.</td>
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<td>Harper &amp; Row, Publishers,   Inc.</td>
<td>10 East 53rd Street</td>
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<td>Harvey House, Publishers</td>
<td>Div. of E.M. Hale &amp; Company</td>
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<td>Hawthorn Books, Inc.</td>
<td>260 Madison Avenue</td>
<td>New York, NY 10016</td>
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<td>Herald Press</td>
<td>616 Walnut Avenue</td>
<td>Scottsdale, PA 15683</td>
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<td>Holt, Rinehart &amp; Winston</td>
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