



Rutgers University Project on Economics and Children
Working Paper Series

No. 2007-02

**Cross-State Variation in Economics Content Standards in
the Primary Grades***

Yana V. Rodgers
Associate Professor, Rutgers University

Shelby Hawthorne
Reading Specialist, Clara Byrd Baker Elementary School

Ronald C. Wheeler
Associate Professor, College of William and Mary

February 2007

* Corresponding author: Yana Rodgers, Department of Women's and Gender Studies, Rutgers University, 162 Ryders Lane, New Brunswick, NJ 08901, tel 732-932-1151, fax 732-932-1335, email yrodgers@rci.rutgers.edu. The authors thank Jeffrey Fitch, Claire Melican, William Rodgers, Michael Salemi, William Walstad, Michael Watts, and three anonymous referees for their useful suggestions. We also thank participants of the Economics and the Classroom Conference and participants of the "Economics Through Literature" session at the Virginia State Reading Association Conference. This research is supported by a College of William and Mary Faculty Research Assignment.

Cross-State Variation in Economics Content Standards in the Primary Grades

Abstract

In the wake of the Goals 2000 Educate America Act of 1994 and the creation of a national set of content standards in economics with fourth grade benchmarks, almost all states have adopted content standards in economics beginning with kindergarten. Our study conducts a close evaluation of all the economics concepts and principles specified in state standards for the primary grades according to degrees of completeness and specificity. Our state-by-state review indicates that states across the country exhibit a wide variation in the types of economics standards they have implemented. This variation means that teachers across the nation face very different bars in terms of the level at which they are expected to teach economics. Results further suggest that states with more complete standards are more likely to have grade-level breakdowns, while states with less complete standards tend to have economics standards defined by grade clusters. We also argue that more assessments are needed to gauge the suitability of the state standards in the early grades.

Keywords: Curriculum, Elementary School, Policy, Assessment

I. Introduction

The Goals 2000 Educate America Act of 1994 included economics among the nine core subject areas that were targeted for the development of content standards. A new set of voluntary national content standards in economics, published in 1997, helped to guide administrators, teachers, and policy makers as they considered various educational objectives in the design of state-level content standards (Buckles, Schug, and Watts 2001). Today, almost all states now have content standards in economics across grade levels, beginning with kindergarten. This study examines the status of economics in the primary grades by examining cross-state variation in all the economics concepts and principles specified in state standards for the primary grades—defined as kindergarten through fourth grade. We find that states exhibit a wide variation in the types of economics standards they have implemented for their public schools. This variation means that some teachers face a very high bar in terms of the level at which they are expected to teach economics, while other teachers face a fairly low bar. The results are used to construct four groups of states that are defined by higher and lower degrees of completeness and specificity in their standards. These groupings, which show how particular states compare with other reference states, suggest that states with more complete standards are more likely to have grade-level breakdowns, while states with less complete standards tend to have economics standards defined by grade clusters.

A small but growing body of research is examining economics education in elementary school, with the overwhelming finding that young students are fully capable of understanding a variety of economic concepts (e.g. Schug and Birkey 1985, and Berti and Bombi 1988). However, despite the prevalence of state standards in the primary grades, there is not enough evidence on the suitability of current state standards in economics. Instrumentation challenges in

assessing young children's learning of economics and the focus of national legislation on reading and math help to explain this lack of evidence. The need for new assessments in economics in the early grades is all the more pressing as teachers work to design lesson plans that incorporate the economics concepts found in states' content standards.

II. The Development of Content Standards in Economics

Curricular reforms that emphasize instruction of economic concepts have affected several generations of elementary-school students. With the "New Social Studies" movement in the 1960s, traditional programs in social studies were replaced with more sophisticated curricula that stressed basic concepts across well-defined social science disciplines (Hertzberg 1981). At the primary grade level, the most popular curriculum in economics was *Our Working World* by Lawrence Senesh (Senesh 1964). Senesh used both textbooks as well as children's stories to teach economic concepts. By the late 1960s, the Senesh material had become one of the most popular commercial products with an economics focus for the primary grades, and economics instruction began to have a formal and more substantial place in the primary-grade curriculum. In a detailed history and assessment of the social studies curriculum, Jenness (1990) identifies Senesh's work as the leading economic education program for young students.

In subsequent decades, the National Council on Economic Education (the NCEE, formerly the Joint Council on Economic Education) has led efforts to encourage teachers and administrators to integrate economics directly into a more central place in the social studies curriculum across grade levels. These efforts include the development and promotion of a host of economic courses, programs, and infusion efforts. For example, its EconomicsAmerica Schools program involves statewide economics councils and university-based centers, helping schools and school districts to develop economics curricula, set standards, and train teachers.

This program grew out of the (now discontinued) Developmental Economic Education Program, which started in 1964 as an experimental teaching program that provided in-service training, curriculum planning, and help with testing (Buckles and Freeman 1984). Millions of students have been reached by these initiatives.

During the 1980s and 1990s, coinciding with the U.S. reform movement toward a standards-based system of education, the NCEE worked on formulating a voluntary national curriculum commonly known as the *Master Curriculum Guide*. This curriculum guide—which was published from several documents as a single curriculum guide by Saunders and Gilliard (1995)—provided a catalog of economic concepts and accompanying teaching materials. This voluntary set of concepts served as the predecessor of the current national standards. In 1994, the Goals 2000 Educate America Act recommended the development of standards in nine core subject areas, including economics. The NCEE lobbied for inclusion of economics in Goals 2000, it found funding for the development of the economic standards, and it brought other groups in economics and education together as a coalition to write content standards for the primary and secondary grades.

The new standards, published as the *Voluntary National Content Standards in Economics* (NCEE 1997), consist of 20 essential principles in economics that students should understand. Each of the 20 principles is accompanied by a rationale for including that standard, a statement about how students can use this knowledge, and examples of activities and lessons that teachers can use to help students demonstrate or improve their understanding of the economics ideas. The standards also include a set of benchmarks (for grades 4, 8, and 12) that elaborate on the principles in increasingly sophisticated levels of attainment. Sixteen of the twenty voluntary standards have benchmarks for the fourth grade, which specify a set of primary-level economics

principles that students are expected to know and use by the time they complete fourth grade. The NCEE provides a range of materials to help teachers incorporate the material into their curricula, and on-line lessons are linked directly to each content standard. Also, a number of scholarly publications (e.g. Meszaros 1997) provide teachers with suggestions and strategies for teaching the standards.

Table 1 contains a condensed version of the voluntary national standards in economics and some of the key 4th grade benchmarks specified in the national standards. The table also contains a set of concepts that are found within the benchmarks, examples, and statements contained in the broader NCEE document. In evaluating the voluntary national standards, Hansen (1998) argues that the standards are accurate and represent a consensus among economics educators. However, the rather cursory exposition in the standards document may make it difficult for educators and administrators to fully implement the new focus on principles. This challenge serves as an important motivation for examining, ten years later, the extent to which state standards have incorporated the principles of the national voluntary standards and the degree to which they have elaborated on the fourth grade benchmarks.

III. The Incidence of Economics Standards Across States

By the year 2000, almost all states (48), plus Washington DC, included economics among their curriculum frameworks, learning objectives, and content standards. This figure represented a sharp increase from 38 states just two years earlier (NCEE 2005). As of early 2007, only one state (Iowa) still has no content standards for any grades in economics. To gain a better understanding of the economic principles and skills to which primary-grade students are currently exposed as a result of state-level standards, we conducted a state-by-state analysis of economics standards in the primary grades. The analysis followed three steps: tabulating an

index of completeness, evaluating whether the standards are clear and specific, and recording the breakdown by grade levels or clusters. These evaluation criteria are based on several of the guidelines described in a report by the American Federation of Teachers on setting strong standards (AFT 2003). In order to calculate the index of completeness, we read each state's economics content standards (usually contained as a strand in the social studies standards) found in the state department of education web sites. We individually checked off each of the sixteen principles found in the national economics standards if the state standards included that principle or at least one of the associated concepts listed in Table 1. The underlying data to construct this index is a matrix of 51 by 16 scores, where each score corresponds to one of 51 states (including Washington DC) and one of 16 economics principles.¹ To evaluate whether the standards are clear and specific, we followed guidelines described in the AFT (2003) report to determine whether each state provided enough details, definitions, and examples to ensure that the exposition in the economics standards would lead to a common interpretation among educators. As our third evaluation criteria, we examined whether states followed the AFT (2003) recommendation that standards be articulated for particular grade levels rather than broad clusters.

The state-by-state results, which are reported in Table 2, show that almost all states have economics standards for every primary grade beginning with kindergarten. The large majority of states embed their economics standards as a strand within the social studies standards; just two states (Colorado and Pennsylvania) have stand-alone economics standards. None of the states have adopted the national standards in economics in their entirety as their official economics standards. Not only are the national economics standards voluntary, but states are also

¹ This matrix is available from the authors upon request.

incorporating and combining several other national standards publications in the social sciences together with their own curricular objectives and state-specific constraints (Buckles, Schug, and Watts 2001). Note that our evaluation is based on content standards posted on-line as of January 2007. As shown by the wide range of publication dates listed in Table 2, content standards do go through periodic revisions, and several web-sites provide a convenient list of links to all the states' current content standards in social studies.²

Table 2 indicates a high degree of variation across states in the completeness and clarity of their economics content standards. In the column with results for completeness, there are just a few states that address 90% or more of the economics principles endorsed in the national voluntary standards. The states with the highest scores include Delaware, Kansas, Nevada, and Pennsylvania. The majority of states—including three of the most populous states (California, Texas, and Florida)—have completeness indices ranging from 63% to 88%. A handful of states are still a long way from specifying content standards that come even reasonably close to addressing the principles and concepts recommended in the NCEE's national standards. Within the bottom tail of the state distribution, Wyoming covers just two of the sixteen recommended standards, and North Dakota covers four of the sixteen. Alaska and Rhode Island have no primary-grade benchmarks, which effectively prevents sending any signal on which economics ideas, if any, primary-grade students are expected to learn.

The "Clear and Specific" column in Table 2 has simple yes/no results for whether or not states included sufficient examples, definitions, and explanations to ensure that each standard would lead to a common interpretation. Again, states exhibit a wide variation in the extent to which their official curricula elaborate on the details. For example, Idaho, a state with a "no"

² See, for example, http://www.crf-usa.org/links/state_standards.htm.

score, refers to the concept of saving in the third grade standards as “Describe the purposes and benefits of savings.” In contrast, Arkansas’s third grade standards incorporate savings with the statement “Identify and define ways of spending and saving,” followed by four subsequent descriptions elaborating on the reasons why people save and how they save, and then six suggested strategies for teaching these ideas. The final column of Table 2 records whether states disaggregate their standards (or benchmarks and expectations) by individual grade levels or whether the standards are presented for grade clusters. States exhibit quite some variation, with almost half of states breaking down their standards into individual grades, and the other half using some type of grade clusters, often K-4.

To help illustrate how states are aligned with each other, Figure 1 uses the data from the review of standards to show four groupings defined by higher and lower degrees of completeness and specificity in the primary-grade economics standards. The cutoff point for “more complete” is a score of 69% or more for the completeness index, and the cutoff point for “more grade specific” is a breakdown by individual grade levels rather than a cluster. Both of these cutoff points are close to the median result, which makes the assignment of states to one of four quadrants fairly objective and transparent. The figure helps put the results from the previous table into perspective by showing how particular states compare with other reference states. It also suggests that states with more complete standards are more likely to have grade-level breakdowns, while states with less complete standards tend to have economics standards defined by grade clusters.

Which economics concepts are most commonly emphasized in the state standards for the primary grades? This question is addressed in Figure 2, which illustrates results from a tally of the number of states including these concepts in their state standards according to the

methodology described above. Results indicate a fairly steep drop in the states' coverage of concepts that are potentially more difficult ideas to teach at the elementary-school level. Among the states with primary-grade content standards in economics, almost all include concepts related to scarcity (standard 1), choice (standard 2), markets (standard 7), human capital (standard 13), and physical capital (standard 15). Surprisingly, given their relevance to the behavior of individuals as well as firms, the concepts of incentives (standard 4) and competition (standard 9) are not very common. The least common across states are inflation and unemployment (standard 19). Even though the national standards have a fourth grade benchmark for inflation and unemployment, very few states introduce these ideas early in the primary grades.

States may address specific concepts in their standards, but that does not mean these concepts are necessarily taught. State test requirements are a more reliable indicator of whether the standards are actually being taught. States that require testing are likely to have less within-state variation in the economics material that is being taught compared to states without testing. This view is supported with evidence cited in Buckles, Schug, and Watts (2001) that assessments provide strong incentives for both teaching patterns and learning outcomes, as particular curricular items are allocated more time and emphasis in the classroom if instructors expect that those items will be included in the state tests. In comparing disciplines, classroom coverage of social science fields with strong mandates and testing requirements, such as history and government, tends to be greater than "marginal" fields such as psychology and sociology, with economics holding a middle position.

A closely related issue is how well the elementary-school assessments are aligned with the state standards. Data from the American Federation of Teachers (2001) shed further light on these issues. The AFT report shows that 28 states require student testing in social studies

(including economics) in elementary school. More than one third of these states begin their testing as early as the second or third grade. The AFT report reviews state standards and test materials from each state with the objective of measuring the movement toward a standards-based education. The report evaluates the alignment of standards and assessments in social studies; economics is not evaluated separately. To meet the AFT's criteria on alignment, a state must be using a test that it developed itself, and it must specify the standards that are assessed. Alternatively, if a state is using an "off-the-shelf" commercially-developed test, then the state must release information about the share of standards that are aligned with the test material, and it must specify the standards that are assessed. Of the 28 states with social studies assessments in elementary school, the AFT report indicates that exactly one half have tests that are aligned with the elementary-school standards, and the other half have tests that are not aligned. The AFT concludes that the main problem for non-aligning states is that they fail to communicate the knowledge and skills for which students will be held accountable.

Consistent with results in NCEE (2005), our review also indicates that more than half of all states now have standards related to personal finance. In almost all cases, any formal course requirements or testing are applicable only at the high school level. Although the incorporation of personal finance concepts into state standards was slow to take off, the complementarities between economic and personal finance education have helped to give personal finance a stronger place in the U.S. school curriculum (Morton 2005). Personal finance education has also gotten increasing attention in policy discourse and the media, reflecting the importance that parents, educators, policy makers, and business leaders attach to equipping K-12 students with the skills and knowledge they need to make informed financial and marketplace decisions.

IV. Suitability of State Standards in Economics

Despite the prevalence of economics standards, too little attention has been paid to the suitability of concepts found in state content standards for the primary grades. Already in the early 1990s, researchers were concerned about the lack of evidence on the validity of economic standards at each grade level (Schug and Walstad 1991). What we do know is that K-12 teachers and administrators generally agree with the scope of the concepts specified in the Council's *Master Curriculum Guide*. Survey results in Watts (1987) indicate that teachers and administrators agreed that students were capable of learning the concepts and it was practical to teach the concepts. Teachers trained in economics responded that particular concepts could be taught at significantly earlier grades compared to teachers not trained in economics, and this difference in responses was largest for the basic concepts at the elementary school level.

An important set of studies at the elementary school level indicate that young children are fully capable of learning and remembering concepts in economics (e.g. Laney and Schug 1998, Schug 1994, and Soper and Walstad 1991). Previous research demonstrates that children can understand economic concepts at an early age; effective approaches to teaching economics have been developed; and students' achievements and attitudes often improve following teacher training programs in economics (e.g. Kourilsky 1977, 1993; Laney 1993). Young children, as a function of everyday life, are already familiar with some basic economic concepts before they enter school and therefore arrive at kindergarten ready to learn economics. When students can relate to content matter based on experiences in their daily lives, they can take greater responsibility for directing their own learning of this material (Brophy and Alleman 1996). Yet care must be taken to present material to young children so that they are challenged but not overwhelmed. The most effective teaching approaches involve the selection of a few concepts that are taught often and in developmentally appropriate ways according to research on key

learning principles (Kourilsky 1987).

With the movement to standards-based education and accountability, over half of all states are currently conducting social studies assessments in elementary school. However, most of the states' assessment materials are based on multiple choice formats geared toward older students in elementary school, not the primary grades. The traditional paper-pencil, multiple-choice format used in state testing programs is unsatisfactory because of the limited reading ability of primary-grade pupils, leading to a strong correlation for primary-grade students between test scores and reading abilities. Another consideration is the maturity and attention span of this age group. Furthermore, almost all of the state-mandated instruments are social studies tests and not specialized economics tests. It can be difficult for a general social studies test to fully represent a broad range of ideas from the individual social science disciplines. This difficulty can cause standardized social studies tests to include only a small sample of economics items, a constraint that further adds to the variance already observed in the economics concepts that are emphasized by different states. To ensure more evenness in economics assessments, states can turn to specialized economics tests as an alternative. One of the most commonly cited instruments for assessing student learning of economics in elementary school is the *Basic Economics Test* (Walstad and Robson 1990), but this test is designed for students in the fifth and sixth grades.

Few sophisticated assessments in economics are underway in the early elementary grades beyond assessments of state curricular standards. One exception is Sosin, Dick, and Reiser (1997), who estimate a set of education production functions to test students' understanding of particular economics concepts for a sample in grades three through six. Although the average student age in the Sosin, Dick, and Reiser sample is older than the students we consider to be in

the primary grades (kindergarten through fourth grade), there is still overlap in the distributions with the inclusion of grades three and four. Results by grade level show that students could understand a variety of ideas in economics, ranging from basic concepts such as scarcity and opportunity costs to more sophisticated concepts such as competition and unemployment. The authors conclude that it is not too soon to start teaching economics in the third grade, leaving open the question about suitability of economics standards for kindergarten through second grade.

One explanation for the assessment gap is the absence of new instrumentation for young students. Research on economics assessment dates back to the 1960s with the development of new instruments for assessing teaching strategies. Early assessment efforts attempted to understand better which techniques should be used to teach economics most effectively to young children. It was assumed that discipline-based programs introducing economics directly into the curriculum would provide a fascinating and meaningful experience for children. By the 1960s, the development of valid and reliable evaluative instruments to document children's success with the material became a major concern for program designers. Guy Larkins and James Shaver were among the first researchers to suggest ways to adapt text format and procedures to assess young children's economic knowledge. They developed an economics achievement test for young children that consisted of matched-pair items (Shaver and Larkins 1967; Larkins and Shaver 1968). This approach involved writing a reversed item for each concept tested, with the words "YES" and "NO" appearing next to each statement. Both statements must be answered correctly for either to be counted. According to the researchers, the matched-pairs format compensated for the tendency of young children to respond affirmatively to statements even if they do not know the answer.

Larkins and Shaver used the Yes-No Matched-Pair format in experimental studies that examined the economic understanding of first-grade students taught with Senesh's program based on teaching economics through literature, compared to control groups that did not experience the program. They reported a significant difference in test scores in favor of the experimental groups taught with a reading-based strategy. Drawing on this new line of work, Davison and Kilgore (1971b) developed a more general test in economics called "The Primary Test of Economic Understanding," using the same Matched-Pair format. Test results in Davison and Kilgore (1971a, 1974) and in Dawson and Davison (1973) demonstrated that primary-grade students' understanding of economic concepts grew following their exposure to specialized strategies and materials.

Another explanation for the assessment gap is insufficient demand for economics assessment in the primary grades. This demand shortage can be explained by the focus of national legislation—most recently the No Child Left Behind Act—on reading and math. States are emphasizing these areas at the expense of others. Closely related, education and economics researchers have not been conducting much empirical work on economic education in the primary grades. A lack of grant funding to support this kind of research and to support the development of new assessment tools may also be a factor.

The difficulty of finding good instruments and the lack of a broad research base are puzzling when one considers that for several decades, the primary grades have served as the place in the social studies curriculum where fundamental economics concepts are introduced for the first time. Interventions to test student understanding would provide invaluable information on whether there is an optimal way to organize the conceptual information by age groups when devising economics standards by grade levels. Although developing appropriate subject-matter

tests for younger learners in the primary grades is not easy, alternative techniques, such as picture-based tasks, verbal discussion, role-playing, constructing displays, and using manipulatives can be used effectively (Alleman and Brophy 1999). Thinking more broadly of assessment tools as learning activities means they can also be woven into instructional units and conducted in a variety of settings with groups, partners, and individuals (Alleman and Brophy 1999). Developing new assessment instruments can initiate further research on important questions related to children's increasing sophistication in understanding the economic concepts currently recommended for the primary grades.

V. Conclusion

Almost all states now have economics standards across grade levels beginning with kindergarten, yet states still exhibit a substantial amount of variation in the particular economics principles and concepts they emphasize, the clarity and specificity with which their standards are written, and the degree to which standards are fine-tuned for particular grade levels or aggregated for grade clusters. Three states have no content standards in economics specified for primary-grade students, and another thirteen states have standards that present primary-grade students with a fairly low bar to cross. The state-level variation may be explained by states' attempts to incorporate multiple national standards in disciplines that comprise the social studies as well as the teaching objectives of their own constituents. However, the concern lies in states that lag behind with superficial and incomplete coverage of economics ideas such as competition, entrepreneurship, and incentives that education and economics specialists consider of vital importance. The lagging states in particular could strengthen their approach to economics education in the primary grades by focusing on the central ideas recommended in the national standards and building upon these ideas each year in an increasingly sophisticated

fashion. This approach is also being advocated for science education in grades K-8, which is currently undergoing calls for a new framework involving a curriculum that is carefully coordinated across individual grades and is more clearly defined with new standards (Duschl, Schweingruber, and Shouse 2006).

Over half of the states begin their social-studies assessment efforts at the elementary-school level, as early as the second grade. With test scores linked to accreditation and funding, the development of effective teaching strategies in economics has taken on added urgency, as has the development of incentives and opportunities for elementary school teachers to enroll in economics training workshops and seminars. Yet testing does not serve as the only motivation for improved standards and teaching strategies in elementary school economics. Younger students enter school with an experience-based knowledge of economics and the ability to learn a range of basic principles during the early years. Early introduction of key economics principles provides an important set of tools that form the building blocks of economic and financial literacy. This argument underlies the new emphasis in policy discourse on “the four R’s” (reading, writing, arithmetic, and readiness), as students gain valuable skills for workforce readiness, financially responsible consumption, and active civic participation. A primary-grade curriculum that carefully links economics ideas across grade levels is crucial for giving students a basic understanding of the economic and financial world around them.

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TABLE 1: The Voluntary National Economics Standards and Selected Primary-Level Concepts

<i>#</i>	<i>Abbreviated Standard</i>	<i>Selected Concepts</i>
1	Productive resources are limited.	Scarcity, opportunity cost, wants and needs, resources, goods and services.
2	Effective decision making requires comparing the additional costs of alternatives with the additional benefits.	Choice, costs and benefits, opportunity cost.
3	Different methods can be used to allocate goods and services.	Prices, contests, sharing, distribution.
4	People respond predictably to positive and negative incentives.	Incentives, rewards, penalties.
5	Voluntary exchange occurs only when all participating parties expect to gain.	Exchange, barter, trade.
6	When individuals, regions, and nations specialize and then trade with others, both production and consumption increase.	Specialization, division of labor, productivity, interdependence.
7	Markets exist when buyers and sellers interact.	Markets, prices, producers, consumers.
8	Prices send signals and provide incentives to buyers and sellers.	Prices, supply and demand.
9	Competition among sellers lowers prices and encourages producers to produce more of what consumers are willing and able to buy.	Competition, prices, quality.
10	Institutions evolve in market economies to help people accomplish their goals.	Saving, banks, borrowing, interest.
11	Money makes it easier to trade, borrow, save, and compare the value of goods and services.	Money, barter.
13	Income is determined by the market value of the productive resources people sell.	Human capital, income, wages, jobs.
14	Entrepreneurs are people who take the risks of organizing productive resources to make goods and services.	Entrepreneurs, risk, invention, innovation.
15	Investment in factories, new technology, and in people can raise future standards of living.	Physical capital, technology, capital resources.
16	There is an economic role for government in a market economy whenever the benefits of a government policy outweigh its costs.	Public goods, taxation, public borrowing.
19	Unemployment imposes costs on individuals and nations. Unexpected inflation imposes costs on many people and benefits some others.	Unemployment, inflation.

Note: Only those standards with Grade 4 benchmarks are included. There are 4 additional national standards. The numbering follows the NCEE numbers assigned to those principles. Incidence refers to the number of states (plus Washington, DC) which include the specified principles or concepts in their standards. The principles are abbreviated to conserve space.

Source: National Council on Economic Education (1997); authors' review in January 2007 of all state department of education web sites.

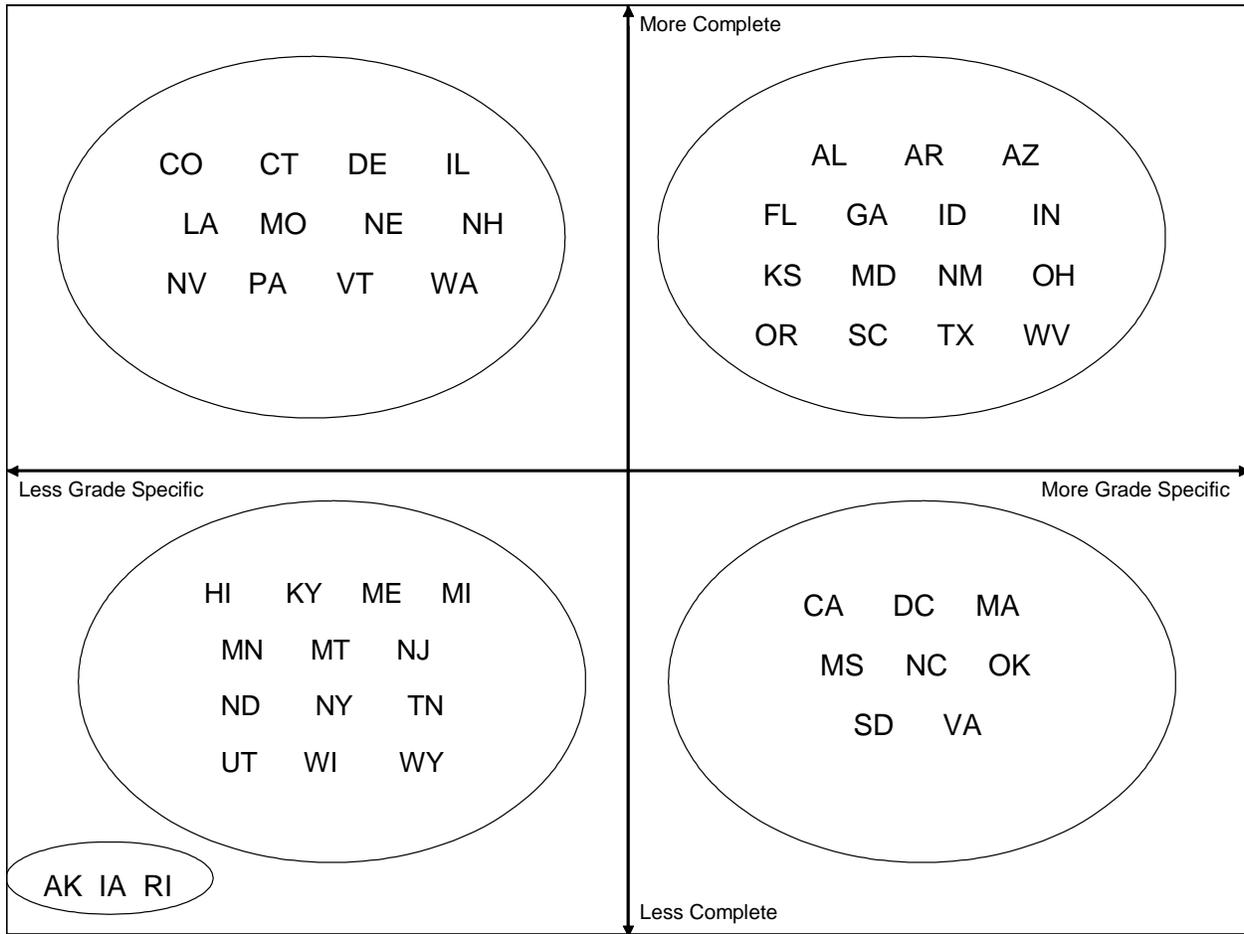
TABLE 2: Economics Content Standards and Curriculum Frameworks in the Primary Grades Across States in 2007

<i>State</i>	<i>Abb.</i>	<i>Publication Year (most recent)</i>	<i>Classification</i>	<i>Completeness (% of Principles Addressed)</i>	<i>Clear and Specific for Common Interpretation</i>	<i>By Primary Grade Levels or Clusters</i>
Alabama	AL	2004	Social Studies	81%	Yes	K, 1, 2, 3, 4
Alaska	AK	2006	Government & Citizenship	–	No	K-12 cluster
Arizona	AZ	2006	Social Studies	88%	Yes	K, 1, 2, 3, 4
Arkansas	AR	2002	Social Studies	81%	Yes	K, 1, 2, 3, 4
California	CA	1998	History & Social Science	63%	Yes	K, 1, 2, 3, 4
Colorado	CO	1998	Economics	81%	Yes	K-4 cluster
Connecticut	CT	1998	Social Studies	69%	No	K-4 cluster
Delaware	DE	2006	Social Studies	94%	Yes	K-1, 2-3, 4-5 clusters
Florida	FL	1999	Social Studies	69%	No	K, 1, 2, 3, 4
Georgia	GA	2004	Social Studies	88%	Yes	K, 1, 2, 3, 4
Hawaii	HI	1999	Social Studies	50%	No	K-3, 4-5 clusters
Idaho	ID	2006	Social Studies	75%	No	K, 1, 2, 3, 4
Illinois	IL	1997	Social Science	88%	No	Early & late elementary
Indiana	IN	2006	Social Studies	81%	Yes	K, 1, 2, 3, 4
Iowa	IA	–	–	–	–	–
Kansas	KS	2005	Social Studies	94%	Yes	K, 1, 2, 3, 4
Kentucky	KY	2001	Social Studies	38%	No	K-5 cluster
Louisiana	LA	1997	Social Studies	88%	No	K-4 cluster
Maine	ME	1997	Social Studies	44%	No	K-2, 3-4 clusters
Maryland	MD	2006	Social Studies	69%	Yes	K, 1, 2, 3, 4
Massachusetts	MA	2003	History & Social Science	63%	Yes	K, 1, 2, 3, 4
Michigan	MI	1996	Social Studies	63%	No	Early & late elementary
Minnesota	MN	2004	Social Studies	38%	Yes	K-3 cluster
Mississippi	MS	2004	Social Studies	38%	Yes	K, 1, 2, 3, 4
Missouri	MO	1996	Social Studies	81%	Yes	K-4 cluster
Montana	MT	2000	Social Studies	44%	No	K-4 cluster

Nebraska	NE	2003	Social Studies/History	75%	No	K-1, 2-4 clusters
Nevada	NV	2000	Social Studies	100%	Yes	K-2, 3, 4-5 clusters
New Hampshire	NH	2006	Social Studies	81%	No	K-2, 3-4 clusters
New Jersey	NJ	2004	Social Studies	63%	No	K-2, 3-4 clusters
New Mexico	NM	2001	Social Studies	81%	No	K, 1, 2, 3, 4
New York	NY	1996	Social Studies	56%	No	Elementary
North Carolina	NC	2003	Social Studies	63%	Yes	K, 1, 2, 3, 4
North Dakota	ND	2000	Social Studies	19%	No	K-4 cluster
Ohio	OH	2004	Social Studies	69%	Yes	K, 1, 2, 3, 4
Oklahoma	OK	2002	Social Studies	56%	Yes	K, 1, 2, 3, 4
Oregon	OR	2003	Social Sciences	75%	Yes	K, 1, 2, 3, 4
Pennsylvania	PA	2003	Economics	94%	Yes	K-3 cluster
Rhode Island	RI	2001	Social Studies	–	No	K-12 cluster
South Carolina	SC	2005	Social Studies	75%	Yes	K, 1, 2, 3, 4
South Dakota	SD	2006	Social Studies	63%	Yes	K, 1, 2, 3, 4
Tennessee	TN	2001	Social Studies	56%	No	K-3, 4 clusters
Texas	TX	1998	Social Studies	75%	Yes	K, 1, 2, 3, 4
Utah	UT	2000	Social Studies	38%	No	3, 4
Vermont	VT	2004	History & Social Science	75%	Yes	K, 1-2, 3-4 clusters
Virginia	VA	2001	History & Social Science	63%	Yes	K, 1, 2, 3, 4
Washington	WA	1996	Social Studies	81%	Yes	K-5 cluster
West Virginia	WV	2006	Social Studies	81%	Yes	K, 1, 2, 3, 4
Wisconsin	WI	1998	Social Studies	44%	No	K-4 cluster
Wyoming	WY	2003	Social Studies	13%	No	K-4 cluster
Washington DC	DC	2006	Social Studies	50%	No	K, 1, 2, 3, 4

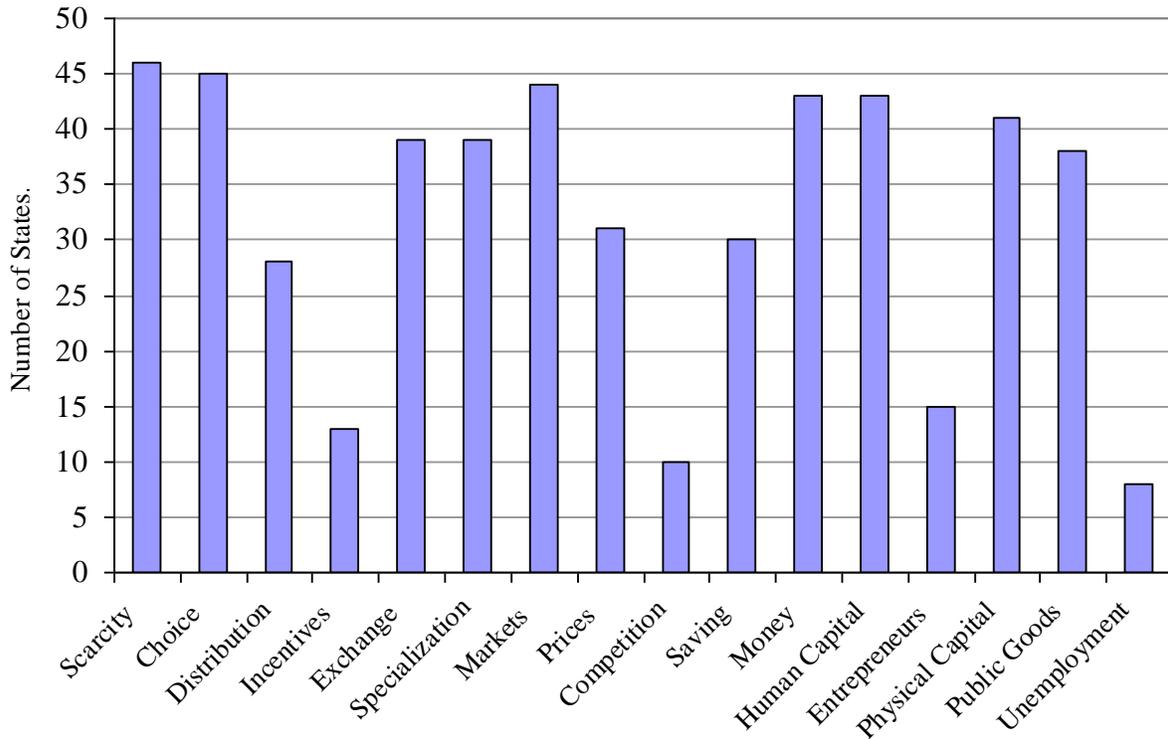
Note: The results for completeness indicate the proportion of the 16 principles described in Table 1 that states address in their content standards. The notation “–” indicates no standards or no elementary-school breakdowns. State abbreviations are used for a grouping analysis in Figure 1. Source: Authors’ review in January 2007 of all state department of education web sites.

FIGURE 1. Primary-Level Economics Standards: State Groups According to Completeness and Specificity of Grade Levels, 2007



Note: Based on data in Table 2, states are grouped according to completeness (with 69% or more considered more complete) and grade-level specificity (with grade clusters considered less specific and a grade-level breakdown considered more specific).

FIGURE 2. Incidence of Selected Concepts in States' Primary-Level Economics Standards, 2007



Note: The concepts along the X axis are abbreviated labels for the principles listed in Table 1, in the same order. Incidence refers to the number of states (plus Washington, DC) which include that principle or at least one of the selected concepts for each principle in their state economics standards.

Source: Authors' review in January 2007 of all state department of education web sites.