

COLORADO



MODEL CONTENT
STANDARDS

ECONOMICS

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INTRODUCTION

Colorado Model Content Standards for Economics

Need and Purpose of Economic Education

According to a recent Gallup poll,

the American public, high school seniors, and college seniors show widespread ignorance of basic economics that are necessary for understanding economic events and changes in the national economy. When asked questions about current economic issues and personal finance, only 35 percent of high school seniors, 39 percent of the general public, and 51 percent of college seniors gave correct answers.*

This lack of understanding of basic economic concepts comes at a time when economics pervades issues of public policy debates such as the budget deficit* and health care reform. Meanwhile in the private realm, individuals and communities are struggling to adapt to structural changes in the economy generated by the impact of technological changes and international competition and cooperation.

Our goal is for students, by the time they graduate from high school, to understand economics well enough to make reasoned judgments about both personal economic questions and broader questions of economic policy in a complex and changing world. Specifically, students need an understanding of basic economic concepts in order to become:

- competent decision-makers throughout their lives;
- effective participants in an international economy;
- productive members of the work force; and
- responsible citizens;
- promoters of the free enterprise system.

Economic reasoning or "the economic way of thinking" is the essential product of the study of economics. Such critical thinking prepares students to weigh not only the short-term effects of a decision but also its long-term effects and possible unintended consequences. It also provides a vital framework within which to make personal economic decisions, to analyze current issues and public policies, and to understand the complex relationships among economic, political, and cultural systems.

Because the use of economic reasoning and the concept of resource tradeoffs in decision-making is the foundation for understanding economics, the idea that all economic choices involve costs is incorporated into the first economic standard. The second standard focuses on understanding the incentive structures of different

economic systems, which enables students to gain a better understanding of how their own system functions. The third standard recognizes that we all have become a part of the international economy and requires students to examine the patterns and interdependence in economic relationships that results from trade and exchange.

Development of These Standards and Their Application

Input into developing the Colorado state economic standards came from a variety of professional associations, non-profit organizations, educators, and private citizens with an interest in economic education. While representing varied points of view, our focal point was A Framework for Teaching Basic Economic Concepts with Scope and Sequence Guidelines K-12 edited by Phillip Saunders and June Gilliard and published by the National Council on Economic Education in 1995.

For students to achieve the levels of understanding outlined in the economic standards, it is necessary to include the core economic concepts within K-12 social studies curriculum, particularly in the context of history, geography, and civics.

The Framework presents a list of what economic concepts should be taught and how to teach them most effectively, including the following points:

- Instructional efforts should concentrate on aiding students to achieve an understanding of fundamental economic concepts and their relationships.
- Students should be given a conceptual framework to help them organize their understanding of economics, and they should be exposed to a manner of thinking that emphasizes systematic, objective analysis.
- The real personal and social advantages of economic understanding becomes apparent as individuals achieve competence in applying their knowledge to a wide range of economic issues they confront.

Because of the tremendous need to improve the economic literacy of our society, a unique network of non-profit agencies has been developed to assist educators with the special materials and training needed to teach economics. These sources of information and support include: the Colorado Council on Economic Education, Junior Achievement, Inc., and the Young Americans Education Foundation.

* Walstad, William and Max Larsen. A National Survey of American Economic Literacy: The Gallup Organization , Inc., 1992

Colorado Model Content Standards

ECONOMICS

- 1. Students understand that because of the condition of scarcity,* decisions must be made about the use of resources*.**
- 2. Students understand how different economic systems impact decisions about the use of resources and the production* and distribution of goods* and services.***
- 3. Students understand the results of trade, exchange, and interdependence* among individuals, households, businesses, governments, and societies.**

** A glossary of terms can be found at the end of this document.*

STANDARD 1: Students understand that because of the condition of scarcity, decisions must be made about the use of scarce resources.

RATIONALE

*Because human, * natural, * and capital resources* are scarce, individuals, households, businesses, governments, and societies must make economic choices about their alternative uses. Economic choices are influenced by economic incentives to use resources efficiently. All economic choices have opportunity costs* with consequences. Technology, the division of labor, * specialization, * and investment* in human and physical capital affects productivity*, economic growth*, levels of employment , equity,* efficiency, * and stability.**

1.1 Students know that economic choices are made because resources are scarce and that the act of making economic choices imposes opportunity costs.

Grades K-4

In grades K-4, what students know and are able to do includes

- identifying goods and services and giving examples of each;
- showing what happens when there are limited resources and unlimited wants and needs; and
- giving an example of the opportunity cost for an individual decision (*for example, choosing to use money to go to the movies may result in not having enough money to eat at a restaurant*).

Grades 5-8

As students in grades 5-8 extend their knowledge, what they know and are able to do includes

- giving examples of situations where households, businesses, governments, and societies deal with scarcity just as individuals do;
- identifying types of scarce productive resources and giving examples of each;
- identifying opportunity costs that individuals, households, businesses, governments, and societies incur when making decisions involving the use of scarce resources; and
- explaining that few economic choices are all-or-nothing propositions and that most economic choices involve tradeoffs.

Grades 9-12

As students in grades 9-12 extend their knowledge, what they know and are able to do includes:

- explaining how economic choices made by individuals, households, businesses, governments, and societies impose opportunity costs on societies as a whole; and
- analyzing the relationship between economic goals and the allocation of scarce resources.

1.2 Students understand that economic incentives influence the use of scarce human, capital, and natural resources.

Grades K-4

In grades K-4, what students know and are able to do includes

- giving examples of different economic incentives (*for example, landowners are paid rent for the use of their land, people who work are paid a wage, people who save money are paid interest, and successful businesses such as a lemonade stand make a profit*).

Grades 5-8

As students in grades 5-8 extend their knowledge, what they know and are able to do includes

- analyzing how economic incentives influence how individuals, households, businesses, governments, and societies use their scarce resources; and
- identifying different economic goals and giving examples of the tradeoffs among economic goals.

Grades 9-12

As students in grades 9-12 extend their knowledge, what they know and are able to do includes

- analyzing how economic incentives influence the economic choices made by individuals, households, businesses, governments, and societies to use scarce human, capital, and natural resources more efficiently to meet their economic goals.

1.3 Students understand that resources can be used in many ways and understand the costs of alternative uses.

Grades K-4

In Grades K-4, what students know and are able to do includes

- describing how consequences of economic choices may affect the future (*for example, using allowance money today for ice cream and candy will not generate savings for a bike in the future*); and
- identifying similar resources that can be used in a variety of ways (*for example, a piece of vacant land can be used to build a office building, a park, a parking lot, a shopping mall or a soccer field*).

Grades 5-8

As students in grades 5-8 extend their knowledge, what they know and are able to do includes

- identifying costs and benefits associated with the use of resources to produce goods and services (*for example, using a gas lawnmower involves the cost of gas and upkeep, but provides the benefit of mowing the lawn faster*);
- identifying externalities* associated with the use of resources; (*for example, using a gas mower creates noise pollution in a neighborhood, but also provides an attractive lawn*);
- explaining how the use of specific resources will influence the availability of other resources in the future;
- identifying choices individuals, households, businesses, governments, and societies make that impact productivity and the future (*for example, choices about the division of labor, the investment in human and physical capital, specialization, and using technology*).

Grades 9-12

As students in grades 9-12 extend their knowledge, what they know and are able to do includes

- explaining how changes in the investment of resources and specialization by individual, households, businesses, governments, and societies affect productivity (*for example, a firm's investment in training enables its individual workers to produce more.*)
- analyzing the costs of alternative uses of resources with respect to present and future productivity; and
- analyzing how the use of technology and the investment in human and physical capital can affect long-range productivity;

- identifying personal investment strategies for different economic goals, such as retirement, a child's education, or saving for a new house (*students should be familiar with the risk-reward level of various types of investments, how risk is matched with the time horizon of the need for the funds invested, and how mutual funds work*).

STANDARD 2: Students understand how different economic systems impact decisions about the use of resources and the production and distribution of goods and services.

RATIONALE

Economic systems develop to enable societies to determine what goods and services will be produced, how they will be produced, and for whom they will be produced. An economic system can be described as the collection of institutions, laws, activities, and economic incentives that govern economic decision making. Types of economic systems include traditional, market,* command,* and mixed.* Understanding the nature of different economic systems is essential to understanding the function of economies as a whole and the United States system in particular.*

2.1 Students understand that different economic systems employ different means to produce, distribute, and exchange goods and services.

Grades K-4

In grades K-4, what students know and are able to do includes

- identifying the three basic economic questions all economic systems must answer: (*What goods and services will be produced? How will they be produced? For whom will they be produced?*); and
- identifying different economic systems (*for example, command, market, and traditional*).

Grades 5-8

As students in grades 5-8 extend their knowledge, what they know and are able to do includes

- describing the characteristics of a traditional, command, market, and mixed economic system;
- explaining how different economic systems use different means to produce, distribute, and exchange goods and services;

- describing how different economic systems affect the allocation of resources (*for example, steel production in the former Soviet Union was determined by economic planners. This affected the allocation of many resources: coal, labor, etc. In the United States, all of these resources are allocated by the market*).

Grades 9-12

As students in grades 9-12 extend their knowledge, what they know and are able to do includes

- comparing and contrasting economic systems in terms of their ability to achieve economic goals; and
- explaining the benefits of the United States economic system.

2.2 Students understand the fundamental characteristics of the United States economic system*.

Grades K-4

In grades K-4, what students know and are able to do include

- describing roles of consumers* and producers* in the U.S. economic system; and
- describing how the price of goods and services in our U.S. economic system is related to how much of a product or resource there is, and how many people want it.

Grades 5-8

As students in grades 5-8 extend their knowledge, what they know and are able to do includes

- describing the relationships among supply,* demand,* and price,* and the role these elements play in the U.S. economic system;
- describing how prices act as signals to producers and consumers to answer the three basic economic questions: (*What goods and services to produce? How will they be produced? For whom will they be produced?*);
- identifying how fundamental characteristics of the U.S. economic system (*for example, competition, the price system, private property, and profits*) influence economic decision making; and
- describing the characteristics that make the United States economy a mixed economy.

Grades 9-12

As students in grades 9-12 extend their knowledge, what they know and are able to do includes

- explaining how businesses, including sole proprietorships,* partnerships,* corporations,* and franchises,* are organized and financed in the U.S. economy;
- describing how changes in income,* tastes, and preferences, and the prices of substitutes* and complements* can cause changes in demand;
- describing how changes in the number of producers, production costs, or the prices of substitute and complementary products cause changes in supply; and
- comparing and contrasting the characteristics of different market structures, including pure competition,* oligopoly,* monopoly,* and monopolistic competition.*

2.3 Students understand that government actions and policies, including taxes*, spending, and regulations influence the operation of economies.

Grades K-4

In grades K-4, what students know and are able to do include

- recognizing that some goods and services are provided by the government (*for example, firefighters, parks, police, and public schools*); and
- explaining that government raises revenue by taxing and borrowing to pay for the goods and services it provides.

Grades 5-8

As students in grades 5-8 extend their knowledge, what they know and are able to do includes

- identifying governmental activities that affect the local, state, or national economy; and
- giving examples of the role of government in a market economic system, (*for example, the government enforces property rights, provisions of contracts and provides a standardized monetary system*).

Grades 9-12

As students in grades 9-12 extend their knowledge, what they know and are able to do includes

- interpreting measurements of inflation rates* and unemployment* rates and relating these to the general economic "health" of the national economy;
- explaining the impact of government taxing and spending decisions on specific individuals, households, businesses, governments, and societies (*for example, social security and Small Business Administration, national debt*);
- comparing and contrasting different types of taxes, including progressive,* regressive,* and proportional* taxes;
- describing the economic roles of government, such as establishing fiscal policy*, providing public goods and services, maintaining competition, generating and using revenues, promoting employment, stabilizing prices, and sustaining reasonable rates of economic growth (*for example, Medicaid, and public education*); and
- describing the effects of specific government regulations on different groups, including consumers, employees, and businesses (*for example, unfunded mandates*); and
- contrasting the concept of customer and consumer.

STANDARD 3: Students understand the results of trade, exchange, and interdependence among individuals, households, businesses, governments, and societies.

RATIONALE

Exchange is essential to all economic activity. Individuals, households, businesses, governments, and societies specialize to make the most efficient use of their resources and they trade to obtain other goods and services they need and want. It is essential to understand how trade results in interdependence and economic change.

3.1 Students understand that the exchange of goods and services creates economic interdependence and change.

Grades K-4

In grades K-4, what students know and are able to do includes

- describing how voluntary exchange of goods and services affects all parties involved in the exchange (*for example, by exchanging clothing for food both parties in the exchange have benefited*);
- describing the interdependence between households and businesses; and
- describing how the exchange of goods and services around the world creates interdependence among people in different places (*for example, the production of a candy bar requires ingredients from around the world*).

Grades 5-8

As students in grades 5-8 extend their knowledge, what they know and are able to do includes

- describing the relationship among trade, specialization, and interdependence; and
- describing how economic interdependence between countries around the world affects the standard of living.

Grades 9-12

As students in grades 9-12 extend their knowledge, what they know and are able to do includes

- giving examples of international differences in resources, productivity, and prices that provide a basis for international trade;
- describing the factors that lead to a nation having a comparative advantage* in trade;
- explaining effects of domestic policies on international trade;
- explaining why nations often restrict trade by using quotas,* tariffs,* and non-tariff barriers* to trade (*for example, cars entering the U.S. must have a catalytic converter*); and
- comparing and contrasting the characteristics of free trade* and restricted trade* (*Example: Embargo*).

3.2 Students understand how a country's monetary system* facilitates the exchange of resources.

Grade K-4

In grades K-4, what students know and are able to do includes

- giving examples of barter as a simple form of exchange;
- explaining the concept of money;
- giving examples of the mediums of exchange in the U.S.; and
- recognizing that different countries use different currencies.

Grades 5-8

As students in grades 5-8 extend their knowledge, what they know and are able to do includes

- explaining that money can be used to express the market value of goods and services in the form of prices;
- describing the role of banks in the monetary system;
- recognizing that the use of credit* involves the use of someone else's money at a certain interest rate*; and
- explaining an exchange rate;*
- describing the difference between wealth and money.

Grades 9-12

As students in grades 9-12 extend their knowledge, what they know and are able to do includes

- explaining the costs and benefits of the use of credit;
- describing the use of monetary and fiscal policies; and
- describing how fiscal or monetary policies can affect exchange rates and international trade.

GLOSSARY

This is a list of technical terms used in the discipline of economics in contrast to terms used in everyday language.

barter - the direct trading of goods and services between people without using money as an intermediate step.

budget deficit - when the amount a household or government spends is greater than their revenues in a given period.

capital resources - resources made by someone which are used to produce other goods or services; for example, machines, tools, factories. Also called physical capital and capital goods.

command economy - an economy in which economic decisions are made largely by an authority such as a government planning agency.

comparative advantage - the principle that a person, firm or country will be better off if it specializes in providing goods and services at a lower opportunity cost.

competition - see "pure competition"

complement - a good or service that is purchased in some proportion to another good or service, such as hot dogs and mustard.

consumers - people who buy and use goods and services; also called buyers.

corporation - a business organization having a continuous existence independent of its members (owners), and power and liabilities distinct from those of its members.

cost - something expended to obtain a benefit or desired result (opportunity cost)

credit - an extension of money or promise by one party to pay another for money borrowed or for goods.

currency - coins and paper money

demand - the different quantities of a resource, good, or service that will be purchased at various possible prices during specific time period.

division of labor - the process whereby workers specialize and perform only a single or a very few steps of a major production task; for example, adding grated cheese to a taco.

economic freedom - consumption and production preferences are individually determined.

economic growth - an increase in real gross domestic product.

economic incentives - factors that motivate and influence human behavior. For example: wages, interest, profits.

economic system - a society's means of deciding what goods and services to produce, and how to

produce and distribute them.

economics – Social science concerned chiefly with the way society chooses to employ its limited resources, which have alternative uses, to produce goods and services for present and future consumption.

efficiency - productive efficiency is getting as much output for as few resources as possible.

equity - economic equity is the application of economic concepts of what is "fair" and what is "unfair" to economic policy. People differ in their conception of what represents equity or fairness. Equity is not synonymous with equality.

exchange rate - the price of one country's currency expressed in terms of another country's currency; the domestic price of a foreign currency.

externality - benefit or cost effects on third parties that people did not take into account when they consumed or produced a good or service. For example: air pollution is a cost generated by consuming gasoline in an automobile.

factors of production – human and nonhuman productive resources of an economy usually classified into four groups: land, labor, capital and entrepreneurialship.

fiscal policy - a policy that uses changes in taxes and government spending to affect the level of aggregate demand in the economy.

franchise - privilege given to sell products or services in a given area, for example, McDonalds, Office Depot.

free trade - unrestricted trade; trade without tariffs, quotas, or barriers.

gross domestic product (GDP) - the market value of the total output of final goods and services produced in a given year within a nation's borders.

GDP per capita - gross domestic product divided by a nation's population.

goods - objects that can satisfy people's wants.

growth - see: "economic growth".

human resources - workers or labor resources.

incentives – something that arouses or stirs one to action.

income - payments (wages, rents, interest, profits) received for the provision of resources.

inflation - a sustained increase in the average price level of the entire economy, measured by a rate expressed as a percent.

interdependence - a situation where people or nations are mutually dependent because of trade.

interest - the income paid to savers; also the cost for the use of credit.

interest rate -percentage figure representing the price paid for the use of credit.

investment - spending for the production and accumulation of capital resources.

market - an institutional arrangement that helps bring about exchange between buyers and sellers.

market economy -an economic system where most goods and services are exchanged through transactions between households and businesses.

market structure - the physical characteristics of the industry market within which firms interact. For example: the number of firms in the industry.

medium of exchange - anything (usually money) that is accepted as payment for goods and services.

mixed economy - economic system that contains elements of traditional, command, and market decision making.

monetary system - a system that organizes the production and distribution of money and near moneys.

money - any medium of exchange that has a standard of value, and a store of value.

monopolistic competition - a market structure characterized by many firms producing differentiated products in a market with easy entry and exit.

monopoly - control of the production and distribution of a product or service by one firm or a group of firms acting in concert; the absence of competition.

national debt - the sum of all deficits experienced to date. See budget deficit.

natural resources - things in a natural state that are used to produce goods and services. For example: land, minerals, and trees.

non-tariff barriers - legal and administrative obstacles to international trade placed on foreign goods and services which slow their importation into a country. These could include safety and environmental standards.

oligopoly - a market structure containing just a few sellers.

opportunity cost -the highest valued alternative that must be given up when another option is chosen.

partnership - a business owned by two or more individuals.

physical capital - see capital resources.

price - the quantity of money paid for a good or service.

property rights - legal rights to private property include the right to use goods in any manner so long as other people's property rights are not violated, the right to exchange private property, and the right to deny the use of private property to others.

producers - people who combine natural, human, and/or capital resources to make goods or provide services.

production - the output of goods and services resulting from the utilization of economic resources.

productivity - the amount of output produced per unit of input; often measured as output per worker per hour.

profit - the amount of a firm's total revenues in excess of its total costs.

progressive tax - a tax system in which tax rates rise as incomes rise.

proportional tax - a tax whose rate remains constant as the tax base grows larger. Also called a flat tax.

proprietorship - the most simple type of business organization with usually a single person owning the firm.

pure competition/perfect competition - a market structure characterized by many buyers and sellers, firms producing identical products, and no barriers to producers to enter and exit.

quotas - a limit on the quantity of a good that may be imported in a given time period.

regressive tax - a tax system in which tax rates fall as income rises.

rent - a payment made for a natural resource, such as land.

restricted trade - trade with tariffs, quotas, or barriers.

resources - inputs or factors used in the production of goods and services. Resources are generally categorized as land (natural resources), labor, and capital (man-made resources).

saving - disposable income not spent for consumer goods.

scarcity - the condition which exists because resources are in fixed or limited supply relative to demand. Thus a cost must be borne in order to obtain a resource when this condition exists.

services - activities that can satisfy human wants; something that one person does for someone else, usually for a wage.

specialization - a situation that occurs when people produce a narrower range of goods and services than they consume. Occurs when different people do very specific jobs to make a product or provide a service.

sole proprietorship - see proprietorship.

stability - stability in an economy implies low inflation and steady growth rates.

substitute - a good or service that can replace one another, such as butter or margarine.

supply - the different quantities of a resource, good, or service that will be offered for sale at various possible prices during a specific time period.

tariff - a tax or duty imposed on imported goods.

tax - a non-voluntary payment to a government for which no good or service is directly received in turn.

technology - the application of scientific knowledge and activities to the production of goods and services.

trade-off - accepting or choosing less of one thing to get more of something else.

traditional economy - both production and distribution is based on procedures devised in the distant past and maintained by law, custom, or belief.

unemployment rate - the amount of people in the labor force without jobs; can be measured as a rate and expressed as a percent.

unfunded mandates – an official command, order, or charge by the government to do something with no funds provided.

wages - payment for human resources or labor; this payment is also known as salaries.

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