

NCTM

National Council of Teachers in Mathematics

Focal Points

The BizMovie program currently aligns with several of the new focal points as outlined by the National Council of Teachers in Mathematics, which are the most important mathematical topics for each grade level. The focal points address major instructional goals and desirable learning expectations, with the intention of building mathematical competency for all students including:

- the use of the mathematics to solve problems
- an application of logical reasoning to justify procedures and solutions; and
- an involvement in the design and analysis of multiple representations to learn, make connections among, and communicate about the ideas within and outside of mathematics.

More specifically, BizMovie emphasizes standards involving numbers and operations, enhancing students' fluency in determining operations, multiplying and dividing whole numbers, adding and subtracting decimals, understanding the relationship between fractions and decimals, and multiplying and dividing fractions and decimals.

NCTM

Correlation to National Standards Bring Standards to Life with BizMovie: NCTM Standards

NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS (NCTM) STANDARDS	Corresponding NCTM Standards	BizMovie Session Numbers														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Numbers & Operations																
Understand numbers, ways of representing numbers, relationships among numbers, and number systems.	a	✓	✓	✓	✓			✓			✓	✓	✓	✓	✓	✓
Understand meanings of operations and how they relate to one another.	b	✓	✓		✓			✓			✓	✓	✓	✓	✓	✓
Compute fluently and make reasonable estimates.	c	✓			✓			✓			✓	✓	✓	✓	✓	✓
Algebra																
Understand patterns, relations, and functions.	d		✓		✓			✓			✓	✓	✓	✓	✓	
Represent and analyze mathematical situations and structures using algebraic symbols.	e	✓			✓							✓	✓	✓	✓	✓
Use mathematical models to represent and understand quantitative relationships.	f	✓			✓			✓			✓	✓	✓	✓	✓	✓
Geometry																
Specify locations and describe spatial relationships using coordinate geometry and other representational systems.	g															✓
Data Analysis and Probability																
Formulate questions that can be addressed with data, and collect, organize, and display relevant data to answer them.	h	✓	✓	✓	✓			✓			✓	✓	✓	✓	✓	✓
Select and use appropriate statistical methods to analyze data.	i											✓	✓	✓		
Develop and evaluate inferences and predictions that are based on data.	j			✓	✓			✓			✓	✓	✓	✓	✓	
Understand and apply basic concepts of probability.	k	✓										✓	✓	✓		✓
Problem Solving																
Solve problems that arise in mathematics and other contents.	l		✓	✓	✓			✓			✓	✓	✓	✓	✓	
Apply and adapt a variety of appropriate strategies to solve problems.	m		✓	✓	✓			✓			✓	✓	✓	✓	✓	
Monitor and reflect on the process of mathematical problem solving.	n		✓	✓	✓			✓			✓	✓	✓	✓	✓	
Reasoning and Proof																
Recognize reasoning and proof as fundamental aspects of mathematics.	o			✓	✓			✓			✓	✓	✓	✓		
Communication																
Organize and consolidate their mathematical thinking through communication.	p			✓	✓			✓			✓	✓	✓	✓	✓	✓
Communicate their mathematical thinking coherently and clearly to peers, teachers, and others.	q			✓	✓			✓			✓	✓	✓	✓	✓	
Analyze and evaluate the mathematical thinking and strategies of others.	r							✓			✓	✓	✓	✓	✓	
Connections																
Recognize and use connections among mathematical ideas.	s			✓	✓			✓			✓	✓	✓	✓	✓	✓
Understand how mathematical ideas interconnect and build on one another to produce a coherent whole.	t				✓			✓			✓	✓	✓	✓	✓	✓
Recognize and apply mathematics in contexts outside of mathematics.	u		✓	✓	✓			✓			✓	✓	✓	✓	✓	✓
Representation																
Create and use representations to organize, record, and communicate mathematical ideas.	v							✓			✓	✓	✓	✓	✓	
Use representations to model and interpret physical, social, and mathematical phenomena.	w			✓								✓	✓	✓	✓	

NCEE

Correlation to National Standards

Bring Standards to Life with BizMovie: NCEE Standards

NATIONAL COUNCIL ON ECONOMIC EDUCATION (NCEE) STANDARDS	Corresponding NCEE Standards	BizMovie Session Numbers														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Scarcity:																
Productive resources are limited. Therefore, people can not have all the goods and services they want; as a result, they must choose some things and give up others.	A		✓	✓	✓			✓				✓		✓		✓
Marginal Cost/Benefit:																
Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Most choices involve doing a little more or a little less of something; few choices are "all or nothing" decisions.	B		✓					✓			✓	✓		✓	✓	
Allocations of Goods and Services:																
Different methods can be used to allocate goods and services. People acting individually or collectively through government, must choose which methods to use to allocate different kinds of goods and services.	C													✓		
Role of Incentives:																
People respond predictably to positive and negative incentives.	D	✓	✓		✓			✓			✓	✓		✓	✓	
Gain from Trade:																
Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and usually among individuals or organizations in different nations.	E				✓			✓			✓	✓				
Specialization and Trade:																
When individuals, regions, and nations specialize in what they can produce at the lowest cost and then trade with others, both production and consumption increase.	F										✓					
Markets-Price and Quantity Determination:																
Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.	G							✓			✓			✓		
Role of Price in Market System:																
Prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives.	H	✓						✓			✓	✓		✓		✓

Correlation to National Standards Bring Standards to Life with BizMovie: NCEE Standards

NATIONAL COUNCIL ON ECONOMIC EDUCATION (NCEE) STANDARDS	Corresponding NCEE Standards	BizMovie Session Numbers														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Role of Competition:																
Competition among sellers lowers costs and prices, and encourages producers to produce more of what consumers are willing and able to buy. Competition among buyers increases prices and allocates goods and services to those people who are willing and able to pay the most for them.	I		✓	✓				✓				✓		✓	✓	
Role of Economic Institutions:																
Institutions evolve in market economies to help individuals and groups accomplish their goals. Banks, labor unions, corporations, legal systems, and not-for-profit organizations are examples of important institution. A different kind of institution, clearly defined and enforced property rights, is essential to a market economy.	J				✓			✓			✓	✓		✓	✓	✓
Role of Money:																
Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services.	K	✓	✓		✓			✓			✓	✓		✓	✓	✓
Role of Interest Rates:																
Interest rates, adjusted for inflation, rise and fall to balance the amount saved with the amount borrowed, which affects the allocation of scarce resources between present and future uses.	L				✓						✓	✓			✓	✓
Role of Resources in Determining Income:																
Income for most people is determined by the market value of the productive resources they sell. What workers earn depends, primarily, on the market value of what they produce and how productive they are.	M		✓		✓			✓				✓		✓	✓	✓
Profit and the Entrepreneur:																
Entrepreneurs are people who take the risks of organizing productive resources to make goods and services. Profit is an important incentive that leads entrepreneurs to accept the risks of business failure.	N		✓	✓	✓			✓			✓	✓		✓	✓	
Role of Government:																
There is an economic role for government in a market economy whenever the benefits of a government policy outweigh its costs. Governments often provide for national defense, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also redistribute income.	O				✓											

NCSS

Correlation to National Standards

Bring Standards to Life with BizMovie: NCSS Standards

NATIONAL COUNCIL FOR THE SOCIAL STUDIES (NCSS) STANDARDS	Corresponding NCSS Standards	BizMovie Session Numbers														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Individual Development and Identity:																
Include experiences that provide for the study of individual development and identity.	a	✓	✓	✓				✓				✓			✓	✓
Work independently and cooperatively to accomplish goals.	b		✓	✓	✓		✓	✓				✓			✓	✓
Individuals, Groups, and Institutions:																
Show how groups and institutions work to meet individual needs and promote the common good and identify examples of where they fail to do so.	c	✓	✓	✓				✓			✓	✓		✓	✓	✓
Power, Authority, and Governance:																
Recognize and give examples of the tensions between the wants and needs of individuals and groups, and concepts such as fairness, equity, and justice.	d		✓	✓	✓		✓	✓			✓	✓		✓		
Production, Distribution, and Consumption:																
Give examples that show how scarcity and choice govern our economic decisions.	e							✓				✓		✓		
Describe how we depend upon workers with specialized jobs and the ways in which they contribute to the production and exchange of goods and services.	f			✓	✓			✓			✓	✓		✓		
Describe the relationship of supply and demand.	g			✓				✓								
Describe the role of specialization and exchange in the economic process.	h			✓				✓			✓	✓		✓		
Civic Ideals and Practices:																
Include experiences that provide for the study of the ideals, principles, and practices of citizenship in a democratic republic.	i		✓					✓				✓		✓	✓	

Correlation to National Standards Bring Standards to Life with BizMovie: NCTE Standards

THE NATIONAL COUNCIL OF TEACHERS OF ENGLISH (NCTE) STANDARDS	Corresponding NCTE Standards	BizMovie Session Numbers														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.	a		✓	✓			✓	✓	✓	✓	✓			✓	✓	✓
Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.	b		✓				✓	✓	✓		✓	✓		✓	✓	✓
Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and non-print texts.	c		✓				✓					✓		✓	✓	✓
Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).	d	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓

Correlation to National Standards Bring Standards to Life with BizMovie: ISTE Standards

THE INTERNATIONAL SOCIETY FOR TECHNOLOGY IN EDUCATION (ISTE)	Corresponding ISTE Standards	BizMovie Session Numbers														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Creativity and Innovation																
Apply existing knowledge to generate new ideas, products, or processes	a					✓			✓	✓						
Create original works as a means of personal or group expression	b				✓			✓	✓							
2. Communication and Collaboration																
Contribute to project teams to produce original works or solve problems	d					✓			✓	✓						
5. Digital Citizenship																
Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity	e					✓			✓	✓						
2. Communication and Collaboration																
Understand and use technology systems	a					✓			✓	✓						
Select and use applications effectively and productively	b					✓			✓	✓						
Troubleshoot systems and applications	c					✓			✓	✓						
Transfer current knowledge to learning of new technologies	d					✓			✓	✓						