

A Big Idea . . .

(description)

Provides a “conceptual lens” for prioritizing content.

A Big Idea refers to core concepts, principles, theories, and processes that should serve as the focal point of curricula, instruction, and assessment. Big Ideas reflect expert understanding and anchor the discourse, inquiries, discoveries, and arguments in a field of study. They provide a basis for setting curriculum priorities to focus on the most meaningful content.

Serves as an organizer for connecting important facts, skills, and actions

Big Ideas function as the “conceptual Velcro” for a topic of study. They connect discrete knowledge and skills to a larger intellectual frame and provide a bridge for linking specific facts and skills. A focus on these larger ideas helps students to see the purpose and relevance of content.

Transfers to other contexts.

Discrete facts do not transfer. Big Ideas are powerful because they embody transferable ideas, applicable to other topics, inquiries, contexts, issues and problems. Because we can never cover all the knowledge on a given topic, a focus on the Big Ideas helps to manage information overload. Big Ideas provide the conceptual throughlines that anchor a coherent curriculum.

Manifests itself in various ways within disciplines

Big Ideas are typically revealed through one or more of the following forms: a core concept (e.g., adaptation), a focusing theme (e.g., man’s inhumanity to man), an ongoing issue or debate (e.g., conservative vs. liberal), a puzzling paradox (e.g., poverty amidst plenty), an important process (e.g., writing process), an authentic problem or persistent challenge (e.g., illiteracy, voter apathy), an illuminating theory (e.g., Manifest Destiny), an underlying assumption (e.g., the markets are rational) or differing perspectives (e.g., terrorist vs. freedom fighter). Additional examples of these Big-Idea categories are provided on the next several pages.

Requires uncoverage because it is an abstraction.

A Big Idea is inherently abstract. Its meaning is not always obvious to students, and simply covering it (i.e., the teacher or textbook defining it) will not ensure student understanding. “Coverage” is unlikely to cause genuine insight; understanding must be earned. Thus, the idea must be uncovered—its meaning discovered, constructed or inferred by the learners, with the aid of the teacher and well-designed learning experiences.

Drafting a Design from Big Ideas

Statistics

Established Goals:

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All students will connect mathematics to other learning by understanding the interrelationships of mathematical ideas and the roles that mathematics and mathematical modeling play in other disciplines and in life.

—NJ Mathematics Standard 3

Understandings:

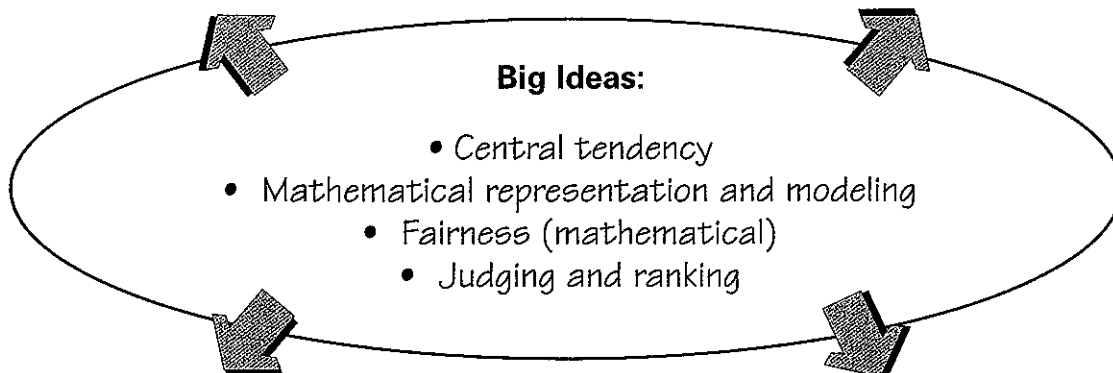
U

- Statistics can represent or model complex phenomena.
- Statistics can be manipulated to obscure the truth.
- There are various mathematical means for reaching “fair” decisions.

Essential Questions:

Q

- What are the limits of mathematical representation and modeling?
- What mathematical methods provide the “fairest” rankings?
- What is “average”?
- How can mathematics help us decide (e.g., in grading, voting, ranking)?



Predictable Misunderstandings and Errors:

- Computing the “average” or determining the majority is the only fair method.
- Statistics never lie.
- Mathematics cannot help us resolve differences of opinion about fairness.

Goals or Rationale:

I want students to understand the varied uses, and pros and cons, of each measure of central tendency. I want them to recognize the value of math in everyday situations, including matters of opinion. These understandings will give them greater power in making sense of statistics and overcoming common misconceptions about probability and fairness.

Drafting a Design from Big Ideas

Reading

Established Goals:

Students will read and respond in individual, literal, critical, and evaluative ways to literary, informational, and persuasive texts; describe the text by giving an initial reaction to the text and explaining its general content and purpose; and generate questions before, during, and after reading, writing, listening, and viewing.

—CT Language Arts Standard 1—Reading and Responding

Understandings:

- Reading involves making sense of the text, not just decoding the words.
- Sometimes authors convey their ideas indirectly and the reader must infer their meanings.
- Friends are trusted people who look out for our interests.
- True friendship is often revealed in times of trouble.

Essential Questions:

- What do good readers do?
- Why do writers and speakers sometimes mean something other than what they write or say?
- How do we read between the lines?
- Who are my true friends, and how do I know?

Big Ideas:

- Reading for meaning
- Indirect expression
- True friends vs. acquaintances
- Fair-weather friends

Predictable Misunderstandings and Errors:

- Reading is decoding the words.
- If it's in a book, it must be true.
- Authors always write exactly what they mean.
- A friend is someone you like to play with.
- Friends never argue.

Goals or Rationale:

I have two simultaneous goals: (1) develop greater skill in reading for meaning, and (2) gain a greater understanding of the qualities of true friendship. Through *Frog and Toad Are Friends* and other stories, I want students to learn that careful reading and thinking can help us explore difficult questions.

Templates
 Stage 1
 Stage 2
 Stage 3
 Peer review
 Exercises
 Process sheets
 Glossary

Concepts—Transferable Big Ideas

Samples

- abundance or scarcity
- acceptance or rejection
- adaptation
- aging or maturity
- balance
- challenge
- change or continuity
- character
- communities
- conflict
- connections
- cooperation
- correlation
- courage
- creativity
- culture
- cycles
- defense or protection
- democracy
- discovery
- diversity
- environments
- equilibrium
- evolution
- exploration
- other _____
- other _____
- fairness
- friendship
- harmony
- honor
- interactions
- interdependence
- invention
- justice
- liberty
- loyalty
- migration
- mood
- order
- patterns
- perspective
- production or consumption
- proof
- survival
- repetition
- rhythm
- symbol
- systems
- technology
- tyranny
- wealth

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