

Unit 05: Knowledge, Belief, and Evidence

Content Area: **Template**
Course(s):
Time Period: **Full Year**
Length: **FY**
Status: **Published**

Standards Alignment

New Jersey Student Learning Standards

Integration of Career Readiness, Life Literacies and Key Skills

CRP.K-12.CRP1	Act as a responsible and contributing citizen and employee.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP3	Attend to personal health and financial well-being.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP5	Consider the environmental, social and economic impacts of decisions.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP7	Employ valid and reliable research strategies.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP9	Model integrity, ethical leadership and effective management.
CRP.K-12.CRP10	Plan education and career paths aligned to personal goals.
CRP.K-12.CRP11	Use technology to enhance productivity.
CRP.K-12.CRP12	Work productively in teams while using cultural global competence.

Technology / Integration of Computer Science and Design Thinking

TECH.8.2.12	Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.
TECH.8.2.12.B	Technology and Society: Knowledge and understanding of human, cultural and society values are fundamental when designing technology systems and products in the global society.
TECH.8.2.12.B.1	Research and analyze the impact of the design constraints (specifications and limits) for a product or technology driven by a cultural, social, economic or political need and publish for review.
TECH.8.2.12.B.2	Evaluate ethical considerations regarding the sustainability of environmental resources

that are used for the design, creation and maintenance of a chosen product.

TECH.8.2.12.B.3

Analyze ethical and unethical practices around intellectual property rights as influenced by human wants and/or needs.

Interdisciplinary Connections: NJSLS for ELA, Social Studies, Science and/or Math Section

LA.RL.11-12	Reading Literature Key Ideas and Details
LA.RL.11-12.1	Cite strong and thorough textual evidence and make relevant connections to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.
LA.K-12.NJSLSA.R1	Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
LA.K-12.NJSLSA.R2	Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
LA.RL.11-12.2	Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.
LA.RL.11-12.3	Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed).
LA.K-12.NJSLSA.R3	Analyze how and why individuals, events, and ideas develop and interact over the course of a text.
LA.RL.11-12.6	Analyze a case in which grasping a point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).
LA.K-12.NJSLSA.R6	Assess how point of view or purpose shapes the content and style of a text.
	Integration of Knowledge and Ideas
LA.K-12.NJSLSA.R7	Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
LA.RL.11-12.7	Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (e.g., Shakespeare and other authors.)
LA.K-12.NJSLSA.R8	Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
LA.K-12.NJSLSA.R9	Analyze and reflect on how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.
	Range of Reading and Level of Text Complexity
LA.RL.11-12.10a	By the end of grade 11, read and comprehend literature, including stories, dramas, and poems at grade level text-complexity or above with scaffolding as needed.
LA.K-12.NJSLSA.R10	Read and comprehend complex literary and informational texts independently and proficiently with scaffolding as needed.
LA.RL.11-12.10b	By the end of grade 12, read and comprehend literature, including stories, dramas, and poems, at grade level or above.
LA.RI.11-12	Reading Informational Text

LA.RI.11-12.8

Describe and evaluate the reasoning in seminal U.S. and global texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses).

LA.RI.11-12.9

Analyze and reflect on (e.g., practical knowledge, historical/cultural context, and background knowledge) documents of historical and literary significance for their themes, purposes and rhetorical features, including primary source documents relevant to U.S. and/or global history.

Integration of Diversity, Equity and Inclusion; Climate Change; Informational and Media Literacy

see Crosswalks

21st Century Life and Careers

Stage I: Desired Results

Transfer/Overview/Rationale

Transfer / Overview / Rationale

Unit Rationale

The purpose of this unit...

Students need to be able to distinguish between knowledge, belief, and evidence. In the world of social media, students have thousands of pieces of information thrown at them every day with little or no context. Understanding the difference between a statement of factual knowledge, unsupported belief and recognizing sound vs unsound evidence is essential to making good decisions.

Meaning

Essential Questions

Essential Questions

- Why is it essential to understand the difference between belief and knowledge?
- What dangers do confusing belief and knowledge pose to individuals and societies?
- How can doubt help individuals understand the world?

Enduring Understanding/Indicators of Understanding

Enduring Understanding/Indicators of Understanding

- To know something and to believe it are two very different things.
- Consumers of information need to recognize the difference between provably, unprovable, reliable and unreliable knowledge to protect themselves from being taken advantage of.
- There are several different ways of “Knowing” information.
- Different types of knowledge require different ways of checking the accuracy of the knowledge
- Understanding and being comfortable with doubt is essential for 21st century thinkers.
- All new information must be evaluated in the context of existing knowledge.

Acquisition (Student Learning Objectives)

Knowledge

Knowledge

Students will know...

* Belief is based on unquestioned adherence to a system of unproven ideas that exist without evidence

- Knowledge is a belief that is supported by facts
- We cannot know something that is not real.
- facts can be judged as real by checking the following elements:
 - **authority:** Who is the author and what are his or her qualifications? Who is the publisher and what is the purpose of the site?
 - **verifiability:** Are sources provided?
 - **timeliness:** Is the information current? When was it posted and/or last updated?
 - **relevance:** Does the material contain unsubstantiated generalizations?
 - **bias:** Is the language emotional or inflammatory? Does the information represent a single opinion or a range of opinions?
 - **orderliness:** Is the page arranged in an order that makes sense? Are underlying assumptions identifiable? Is the information consistent?
 - **clarity:** Is the information clearly stated? Does the author define important terms?
 - **validity:** Do the facts presented support the conclusions?
 - Ways of Knowing
 - Informal observation-Occurs when we make observations without any systematic

process for observing or assessing the accuracy of what we observed. Selective observation-Occurs when we see only those patterns that we want to see or when we assume that only the patterns we have experienced directly exist.

- Overgeneralization- occurs when we assume that broad patterns exist even when our observations have been limited.
- Authority- A socially defined source of knowledge that might shape our beliefs about what is true and what is not true.
- Research Methods-An organized, logical way of learning and knowing about our social world.

Skills

Skills

Student will be skilled at ...

- recognizing you can not prove a negative
- recognizing belief based vs knowledge systems of reasoning
- evaluating the accuracy of facts using a knowledge-based system
- understanding the role of doubt in evaluation new or "weird" ideas.

Stage 3: Learning Plan

Resource and Mentor Texts

Resources and Mentor Texts

Primary sources- teacher made units based on the following texts

- How to think about weird Things- critical thinking for a new age. by Theodore Schick and Lewis Vaughn
- How to think like a Freak- the authors of Freakonomics offer to retrain your brain- Steven Levitt and Stephen Dubner
- Why People Believe Weird Things- Pseudoscience, superstition, and other confusions of our age- Michael Shermer
- A Candle in the Dark- Carl Sagan
- Skeptic magazine
- Skeptical Inquirer magazine

Formative Assessment Strategies

Formative Assessment Strategies

Students will be assessed by

- questions
- think-pair- share sessions
- fast five quizzes
- RACE paragraph
- mini oral review
- teacher/student conference
- Students created presentations

Learning Activities/Unit of Study

Learning Activities/Unit of Study

Students will

- * Read non-fiction works
- Find resources online
- pose questions
- find and evaluate resources
- apply elements of critical thinking to real-world situations
- evaluate the logic and accuracy of real-world situations
- create and deliver presentations supporting your analysis of a real-world situation

Modifications and/or Accommodations

Suggested Modifications (ELL, Sp. Ed, Gifted, At-risk of Failure)

English Language Learners

Native language support: The teacher provides auditory or written content to students in their native language.

Adjusted Speech: The teacher changes speech patterns to increase student comprehension. This could include facing the students, paraphrasing, clearly indicating the most important ideas, and

speaking more slowly.

Visuals: The teacher uses graphics, pictures, visuals, and manipulatives. This helps ELL students better understand and comprehend the subjects at hand.

Front-Loading Vocabulary: The teacher front loads vocabulary. This means providing students with a list of important vocabulary words they will need to know for a book, lesson, etc. prior to the lesson being taught. Including pictures to go with the vocabulary words is also very beneficial for the students.

Special Education Students

Chunking: The teacher presents information in a way that makes it easy for students to understand and remember. Chunking is based on the presumption that our working memory is easily overloaded by excessive detail. The best way to deliver information is to organize it into meaningful units. Because students with special needs get overloaded easily, chunking is an effective strategy to use with them.

Checking for Understanding: It is important to constantly check for understanding, especially for students who have accommodations. Teachers want to make sure students understand the concepts being covered in a way that makes sense to them.

Extra time: The teacher provides students with special needs extra time to complete work or answer questions. It is important to give students enough time to process their thoughts.

Oral Reading: The teacher will read work orally to students. Class work such as tests and literature circles may need to be read aloud to the student.

Timers: The teacher will use timers as an instructional tool. The use of timers is beneficial for students who have trouble completing tasks. Timers can be helpful so the student is aware of how much time they have to complete an assignment.

Students with 504 Plans

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Gifted & Talented Strategies

Extensions/Enrichments: Teachers will provide gifted and talented students with extension/enrichment projects. Students will be challenged to further their understanding, to apply acquired knowledge, and/or to produce something in reference to acquired knowledge.

Modify/Change Activities: Teachers will monitor and modify activities to accommodate those students who need to be challenged further. Additional reading, problem-solving, writing, or project work is necessary for those students who are ready to move on at a rate more accelerated than their peers. In this way, G & T students are provided the same opportunity for support as special needs students.

Students at Risk of School Failure

Directions or Instructions: Make sure directions and/or instructions are given in limited numbers. Give directions/instructions verbally and in simple written format. Ask students to repeat the instructions or directions to ensure understanding occurs. Check back with the student to ensure he/she hasn't forgotten.

Peer Support: Peers can help build confidence in other students by assisting in peer learning. Many teachers use the 'ask 3 before me' approach. This is fine, however, a student at risk may have to have a specific student or two to ask. Set this up for the student so he/she knows who to ask for clarification before going to you.

Alternate or Modified Assignments: Always ask yourself, "How can I modify this assignment to ensure the students at risk are able to complete it?" Sometimes you'll simplify the task, reduce the length of the assignment or allow for a different mode of delivery. For instance, many students may hand something in, the at-risk student may jot notes and give you the information verbally. Or, it just may be that you will need to assign an alternate assignment.

Increase One to One Time: When other students are working, always touch base with your students at risk and find out if they're on track or needing some additional support. A few minutes here and there will go a long way to intervene as the need presents itself.

Contracts: It helps to have a working contract between you and your students at risk. This helps prioritize the tasks that need to be done and ensure completion happens. Each day write down what needs to be completed, as the tasks are done, provide a checkmark or happy face. The goal of using contracts is to eventually have the student come to you for completion sign-offs.

Hands On: As much as possible, think in concrete terms and provide hands-on tasks. This means a child doing math may require a calculator or counters. The child may need to tape record comprehension activities instead of writing them. A child may have to listen to a story being read instead of reading it him/herself.

Tests/Assessments: Tests can be done orally if need be. Break tests down in smaller increments by having a portion of the test in the morning, another portion after lunch and the final part the next day.

Seating: Seat students near a helping peer or with quick access to the teacher. Those with hearing or sight issues need to be close to the instruction which often means near the front.

