

# Empire State Information Fluency Continuum

## K-12 Priority Benchmark Skills

Developed by the New York City School Library System

The information and inquiry skills  
required for in-depth learning

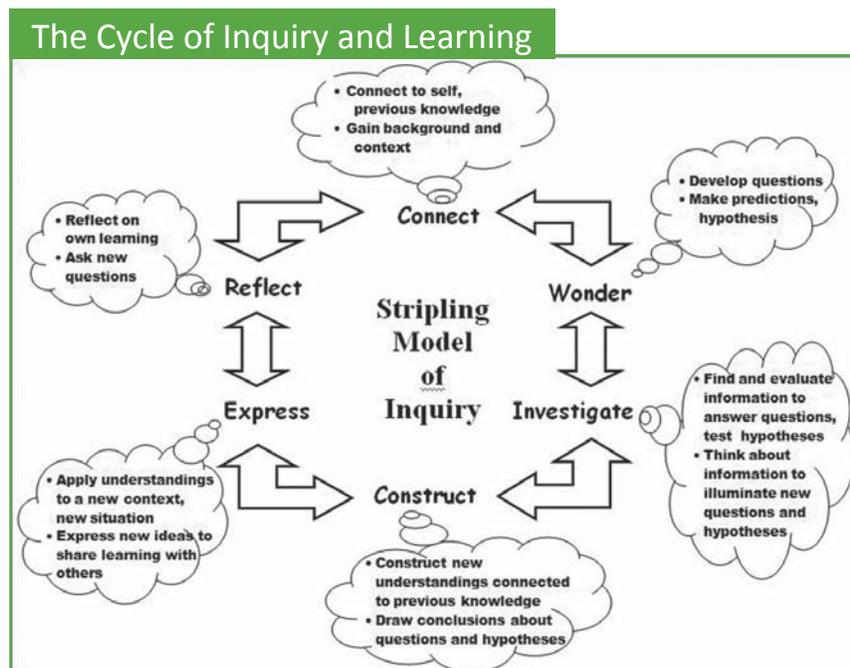




## Empire State Priority Benchmark Skills for Information Fluency and Inquiry

Inquiry is a fundamental building block of teaching and learning that empowers students to follow their sense of wonder into new discoveries and insights about the way the world works. The empowered learner calls upon information/inquiry skills to connect with what he or she knows, ask intriguing questions about what is not known, investigate the answers, construct new understandings, and communicate to share those understandings with others.

Students need to use the skills of inquiry to learn. The Cycle of Inquiry and Learning provides a framework for active learning and the formation of new understandings.



The information and inquiry skills required for in-depth learning must follow a coherent development spiral of instruction and practice throughout the years of schooling, K–12 and beyond, to enable all of our children to become independent learners.

A collaborative approach by the librarian and the classroom teacher is the most effective way to teach information fluency/inquiry skills and strategies.

## Grade K

**The information-literate student in Grade K has developed the following skills:**

- Connects ideas to own interests
- Understands the basic organizational structure of books
- Distinguishes between fiction and nonfiction resources
- Demonstrates simple organizational skills such as sorting and categorizing
- Presents facts and simple answers to questions
- Identifies own strengths and sets goals for improvement

## Grade 1

**The information-literate student in Grade 1 has developed the following skills:**

- Shares what is known about the general topic to elicit and make connections to prior knowledge
- Recognizes that fiction and picture books are organized by the author's last name in A-B-C order
- Distinguishes between fact and opinion
- Finds facts and briefly summarizes them via writing, drawing, or verbalization to answer research questions
- Draws a conclusion about the main idea with guidance
- Asks, "What do I wonder about now?"
- Identifies own strengths and sets goals for improvement

## Grade 2

**The information-literate student in Grade 2 has developed the following skills:**

- Recognizes that questions can be answered by finding information
- Asks "I wonder" questions about the research topic
- Follows a modeled inquiry process during each visit to the library to do research
- Writes, draws, or verbalizes the main idea and supporting details
- Compares new ideas with what was known at the beginning of the inquiry
- Presents information in a variety of ways (e.g., art, music, poetry, movement, verbally, and/or written language)
- Identifies own strengths and sets goals for improvement

## Grade 3

**The information-literate student in Grade 3 has developed the following skills:**

- Identifies the ten major Dewey areas and what main topics are included in each
- Searches the online catalog (author, title, and subject) with assistance to locate materials
- Uses bookmarked Websites to find appropriate information
- States the main idea
- Chooses the format for the product based on personal preference or uses format chosen by the teacher or librarian
- Presents information clearly so that main points are evident
- Assesses and revises own work with guidance
- Identifies own strengths and sets goals for improvement

## Grade 4

**The information-literate student in Grade 4 has developed the following skills:**

- Generates a list of key words for a research-based project with guidance
- Asks questions to clarify topics or details
- Predicts answers to inquiry questions based on background knowledge and beginning observation or experience
- Uses selected search engines to find appropriate information
- Paraphrases, summarizes information that answers research questions
- Identifies facts and details that support main ideas
- Uses common organizational patterns (chronological order, main idea with supporting details) to organize information
- Identifies and evaluates the important features for a good product
- Assesses and revises own work with guidance
- Identifies own strengths and sets goals for improvement

## Grade 5

### The information-literate student in Grade 5 has developed the following skills:

- Uses sources to acquire background information and brainstorms ideas for further inquiry
- Assesses questions to determine which can be answered by simple facts, which cannot be answered, and which would lead to an interesting inquiry
- Selects and uses multiple appropriate print, nonprint, electronic, and human sources to answer questions
- Uses navigation tools of a Website to find information
- Evaluates print and electronic information for usefulness, relevance, and accuracy
- Uses various notetaking strategies (e.g., outlining, underlining, bulleted lists, highlighting, graphic organizers)
- Forms opinion and uses evidence from text to back it up
- Cites all sources used according to model provided by teacher
- Modifies and revises own work based on feedback from teacher and others
- Assesses and revises own work with guidance
- Identifies own strengths and sets goals for improvement

## Grade 6

### The information-literate student in Grade 6 has developed the following skills:

- Uses online catalog independently to locate specific books, get classification numbers, and browse the shelves
- Uses both primary and secondary sources
- Combines information and weighs evidence to draw conclusions and create meaning
- Presents conclusions and supporting facts in a variety of ways

## Grade 7

### The information-literate student in Grade 7 has developed the following skills:

- States and verifies what is known about the problem or question and makes connections to prior knowledge
- Analyzes and evaluates what is known, observed or experienced to form tentative thesis or hypothesis
- Evaluates quality of electronic and print information for usefulness, currency, authority and accuracy
- Uses both facts and opinions responsibly by identifying and verifying them
- Uses common organizational patterns (chronological order, cause and effect, compare/contrast) to organize information in order to draw conclusions
- Interprets information and ideas by defining, classifying, and inferring
- Cites all sources used according to local style formats
- Uses established criteria or collaborates with classmates and teacher to develop criteria for assessment

## Grade 8

### The information-literate student in Grade 8 has developed the following skills:

- Revises the question or problem as needed to arrive at a manageable topic for inquiry
- Refines questions to guide the search for different types of information (e.g., overview, big idea, specific detail, cause and effect, comparison)
- Uses different formats (e.g., books, Websites, subscription databases, multimedia, graphs, charts, maps and diagrams) as sources of information
- Recognizes the effect of different perspectives and points of view on information
- Recognizes that own point of view influences the interpretation of information
- Draws conclusions based on explicit and implied information
- Creates products for authentic reasons and audiences
- Identifies own strengths and sets goals for improvement



## Grade 9

**The information-literate student in Grade 9 has developed the following skills:**

- Identifies key words, concepts, and synonyms, both stated and implied, for topic and uses them to further research
- Develops a schema or mind map to express the big idea and the relationships among supporting ideas and topics of interest
- Takes notes using one or more of a variety of notetaking strategies, including reflecting on the information (e.g., graphic organizers, two-column notes)
- Organizes information independently, deciding the structure based on the relationships among ideas and general patterns discovered
- Identifies own strengths and sets goals for improvement

## Grade 10

**The information-literate student in Grade 10 has developed the following skills:**

- Develops and refines the topic, problem, or question independently to arrive at a worthy and manageable topic for inquiry
- Refines questions to provide a framework for the inquiry and to fulfill the purpose of the research
- Conducts advanced Web searches using Boolean logic and other sophisticated search functions
- Draws clear and appropriate conclusions supported by evidence and examples
- Cites all sources used according to standard style formats
- Records individual experience of the inquiry process – the hardest part, best part, skills learned, insights experienced, etc. – with suggestions for future improvements

## Grade 11

**The information-literate student in Grade 11 has developed the following skills:**

- Plans inquiry to systematically test hypothesis or to gather evidence to validate thesis
- Pursues a balanced perspective by evaluating information based on authority, accuracy, point of view, and reliability
- Uses the organizational features of a book as well as abstracts, tables, charts and first and last chapters to locate main ideas, specific supporting evidence, and a balanced perspective
- Presents different perspectives with evidence for each
- Chooses the most appropriate format, tone and language to communicate ideas clearly in real world formats to different audiences

## Grade 12

**The information-literate student in Grade 12 has developed the following skills:**

- Explores problems or questions for which there are multiple answers or no “best” answer
- Challenges ideas in text and makes notes of questions to pursue in additional sources
- Builds a conceptual framework by synthesizing ideas gathered from multiple sources
- Develops own point of view and supports with evidence
- Evaluates own product and process throughout the work and uses self-assessment, teacher feedback, and peer feedback to make revisions when necessary



# EMPIRE STATE INFORMATION FLUENCY CONTINUUM FRAMEWORK

## STANDARD 1: USING INQUIRY TO BUILD UNDERSTANDING AND CREATE NEW KNOWLEDGE

**"I am a thinker."**

An independent learner asks authentic questions and accesses, evaluates, and uses information effectively to develop new understandings.

### INQUIRY PHASE: CONNECT

Connecting to own interests, prior knowledge, and background knowledge

### INQUIRY PHASE: WONDER

Asking questions, making predictions, forming tentative thesis

### INQUIRY PHASE: INVESTIGATE

Finding and evaluating information to answer questions

### INQUIRY PHASE: CONSTRUCT

Constructing new understandings, forming opinions, drawing conclusions

### INQUIRY PHASE: EXPRESS

Applying new understandings to new context; expressing new ideas to share with others

### INQUIRY PHASE: REFLECT

Reflecting on own learning; asking new questions

## STANDARD 2: PURSUING PERSONAL AND AESTHETIC GROWTH

**"I am an explorer."**

An independent learner responds to and creates literary and artistic expressions, uses effective strategies for personal exploration of ideas, and reads on his or her own by choice.

### READER/VIEWER RESPONSE AND EXPRESSION

### PERSONAL EXPLORATION

### MOTIVATED, INDEPENDENT LEARNING

## STANDARD 3: DEMONSTRATING SOCIAL RESPONSIBILITY

**"I am a citizen."**

An independent learner contributes to the learning community by seeking multiple perspectives, sharing his or her understandings with others, and using information and resources ethically.

### IMPORTANCE OF INFORMATION TO A DEMOCRATIC SOCIETY

### EFFECTIVE SOCIAL INTERACTION TO BROADEN UNDERSTANDING

### ETHICAL BEHAVIOR IN USE OF INFORMATION

