

NATIONAL SUBJECT STANDARDS REQUIRING OR ALIGNED WITH STUDENT RESEARCH ASSIGNMENTS

Common Core College- and Career-Readiness Standards may have caused teachers to abandon research assignments. Recapture research partnerships between teachers & the School Librarian by using these **46 National Standards for middle school** that either require or align with students doing research.

COMMON CORE ELA STANDARDS

8 Standards related to research skills:

- R.CCR.7: Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.
- R.CCR.8: 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.
- R.CCR.9: Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.
- W.CCR.7: Conduct short as well as more sustained **research** projects based on focused questions, demonstrating understanding of the subject under investigation.
- W.CCR.8: Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
- W.CCR.9: Draw evidence from literary or informational texts to support analysis, reflection, and **research**.
- SL.CCR.4: Present information, findings, and supporting evidence such that listeners can follow the line of reasoning, and the organization, development, and style are appropriate to task, purpose, and audience.
- SL.CCR.5: Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

COMMON CORE LITERACY STANDARDS FOR HISTORY/SOCIAL STUDIES AND FOR SCIENCE & TECHNICAL SUBJECTS FOR MIDDLE SCHOOL

7 Standards related to research skills:

- R.LHSS.2: Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.
- R.LSTS.8: Distinguish among facts, reasoned judgment based on **research** findings, and speculation in a text.

- W.LHSS8.1a: Introduce claim(s) about a topic or issue, acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.
- W.LHSS.1b: Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.
- W. LHSSST.7: Conduct short **research** projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
- W.LHSSST.8: Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
- W.LHSSST.9: Draw evidence from informational texts to support analysis reflection, and **research**.

C3 FRAMEWORK FOR SOCIAL STUDIES STANDARDS

Three of the 4 Dimensions include **9** Standards related to research skills:

- D1.2.6-8. Explain points of agreement experts have about interpretations and applications of disciplinary concepts and ideas associated with a compelling question.
- D1.3.6-8. Explain points of agreement experts have about interpretations and applications of disciplinary concepts and ideas associated with a supporting question.
- D1.5.6-8. Determine the kinds of sources that will be helpful in answering compelling and supporting questions, taking into consideration multiple points of views represented in the sources.
- D3.1.6-8. Gather relevant information from multiple sources while using the origin, authority, structure, context, and corroborative value of the sources to guide the selection.
- D3.2.6-8. Evaluate the credibility of a source by determining its relevance and intended use.
- D3.3.6-8. Identify evidence that draws information from multiple sources to support claims, noting evidentiary limitations.
- D4.1.6-8. Construct arguments using claims and evidence from multiple sources, while acknowledging the strengths and limitations of the arguments.
- D4.3.6-8. Present adaptations of arguments and explanations on topics of interest to others to reach audiences and venues outside the classroom using print and oral technologies (e.g., posters, essays, letters, debates, speeches, reports, and maps) and digital technologies (e.g., Internet, social media, and digital documentary).

- D4.4.6-8. Critique arguments for credibility.

In addition, in Table 4 on page 20, I count **27** Common Core ELA/Literacy in History/Social Studies Standards to which C3 Framework Dimensions connect.

NEXT GENERATION SCIENCE STANDARDS (NGSS)

The four disciplines include **8** Standards related to research skills or that align with the four CCSS Standards listed above for Science & Technical Subjects:

- MS-PS1-3 Matter and its Interactions
Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.
- MS-PS1-6 Matter and its Interactions
Undertake a design project to construct, test, and modify a device that either releases or absorbs thermal energy by chemical processes.
- MS-PS3-3 Energy
Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.
- MS-PS4-3 Waves and their Applications in Technologies for Information Transfer
Integrate qualitative scientific and technical information to support the claim that digitized signals are a more reliable way to encode and transmit information than analog signals.
- MS-LS4-5 Biological Evolution: Unity and Diversity
Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms.
- MS-ESS2-2 Earth's Systems
Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.
- MS-ESS3-1 Earth and Human Activity
Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.
- MS-ESS3-5 Earth and Human Activity
Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.

COMMON CORE COLLEGE- AND CAREER-READINESS STANDARDS FOR MATH

Under Statistics and Probability, **2** Standards related to research skills:

- *Mathematical Practices: Construct viable arguments and critique the reasoning of others.*

- M6.SP.1: Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.
- M6.SP.5b: Summarize numerical data sets in relation to their context, such as by describing the nature of the attribute under investigation, including how it was measured and its units of measurement.

NATIONAL CORE ARTS STANDARDS FOR MEDIA ARTS, MUSIC, THEATRE, AND VISUAL ARTS

8 Standards related to research skills:

- MA6.Cn10.1a: Access, evaluate, and use internal and external resources to create media artworks, such as knowledge, experiences, interests, and **research**.
- MA6.Cn11.1a: **Research** and show how media artworks and ideas relate to personal life, and social, community, and cultural situations, such as personal identity, history, and entertainment.
- MA6.Cn11.1b: Analyze and interact appropriately with media arts tools and environments, considering fair use and copyright, ethics, and media literacy.
- MU.Pr4.1.6: Apply teacher-provided criteria for selecting music to perform for a specific purpose and/or context, and explain why each was chosen.
- MU.Pr4.1.7: Apply collaboratively-developed criteria for selecting music of contrasting styles for a program with a specific purpose and/or context and, after discussion, identify expressive qualities, technical challenges, and reasons for choices.
- MU.Pr4.1.8: Apply personally-developed criteria for selecting music of contrasting styles for a program with a specific purpose and/or context and explain expressive qualities, technical challenges, and reasons for choices.
- VA.Crt1.2.6: Formulate an artistic investigation of personally relevant content for creating art.
- TH.Cn11.2.6b: Investigate the time period and place of a drama/theatre work to better understand performance and design choices.

CAREER & TECHNICAL EDUCATION CORE

4 Standards related to research skills:

- CCTC.AG.1: Analyze how issues, trends, technologies and public policies impact systems in the Agriculture, Food & Natural Resources Career Cluster.
- CCTC.AG-ANI1: Analyze historic and current trends impacting the animal systems industry/
- CCTC.AC.4: Evaluate the nature and scope of the Architecture & Construction Career Cluster and the role of architecture and construction in society and the economy.
- CCTC.AC-DES.1: Justify design solutions through the use of **research** documentation and analysis of data.

PROMOTE RESEARCH ASSIGNMENTS WITH EVERY TEACHER

The conclusion is inescapable: in order to comply with all of the National Standards, students need a research assignment within every content area class!

Don't short-change students toward future pursuits because they don't know how to do proper research. All subject areas can collaborate with the School Librarian to create a variety of research lessons that address each element of Library Information Literacy.

Teaching research skills is our raison d'être.

This PDF is associated with a blog post on the Looking Backward blog:

“School Librarians: Show Teachers Their National Standards Require Student Research”

<https://lookingbackward.edublogs.org/2020/10/16/national-standards-research/>