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# RESEARCHING TO DEEPEN UNDERSTANDING

DEVELOPING CORE PROFICIENCIES  
ENGLISH LANGUAGE ARTS / LITERACY UNIT

GRADES 9-10

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RESEARCH TOPIC REPOSITORY

## TECHNOLOGY



## DEVELOPING CORE PROFICIENCIES SERIES

This unit is part of the Odell Education Literacy Instruction: Developing Core Proficiencies program, an integrated set of ELA units spanning grades 6–12. Funded by USNY Regents Research Fund, the program is comprised of a series of four 3-week units at each grade level that provide direct instruction on a set of literacy proficiencies at the heart of the CCSS.

Unit 1: Reading Closely for Textual Details  
Unit 2: Making Evidence-Based Claims  
Unit 3: Researching to Deepen Understanding  
Unit 4: Building Evidence-Based Arguments

The Core Proficiencies units have been designed to be used in a variety of ways. They can be taught as short stand-alone units to introduce or develop key student proficiencies. Teachers can also integrate them into larger modules that build up to and around these proficiencies. Teachers can also apply the activity sequences and unit materials to different texts and topics. The materials have been intentionally designed for easy adaptation to new texts and topics.

Unit materials are available at [www.odelleducation.com](http://www.odelleducation.com)



## RESEARCHING TO DEEPEN UNDERSTANDING

Literacy is the ability to explore and express meaning in a given medium. There are certain core proficiencies one develops to gain fluency and expressiveness in that medium. One develops attunement to the intricacies of expression and the way meaning is created and constructed in it. One also develops the ability to express understanding and explain that understanding given the evidence at hand. These proficiencies of attention and explanation serve one of literacy's purposes, which is to explore what that medium holds—the aspects of life it illuminates.

Exploration, itself, is a proficiency. There are skills, methods, and habits of mind that we can develop to lead us ever deeper into the experiences accessed in that medium. These skills involve being open to new knowledge, asking questions and finding better and new answers. They involve listening to those around us, building on what they know and have experienced, and incorporating that knowledge into our own exploration. They also involve making

connections and organizing what we find, then returning to and refining those questions. As we explore, we also develop our ability to explain what we've come to think and show why we think it. Eventually this exploration—the process of research—leads us to a growing perspective rooted in deep knowledge and understanding.

This unit develops that explorative proficiency: researching to deepen understanding. It lays out a process through which students learn to explore topics with their learning community, posing and refining questions and listening to experiences, and discovering areas they wish to investigate. It develops their ability to determine what they don't know or understand, and where and how to find that information. The unit also develops and supports student ability to archive and organize information in order to see and analyze connections in ways that aid comprehension, deepen their understanding and prepare them to express their evolving perspective.



## HOW THIS UNIT IS STRUCTURED

Instruction in this unit is built around three components: a process for conducting research, a Research Portfolio developed by students throughout the process, and choosing a topic to research. The unit activities integrate these components in a learning progression that develops and supports proficiency in the entire research process.

### *Research Portfolio*

The Research Portfolio is a structured collection of the research and analysis that students compile in their investigation. The components of the portfolio guide and archive the student's work in a way that teaches them key critical thinking, academic habits and organizational skills. By the end of the unit, students will have an organized, structured set of sources, annotations, notes, and analysis from which they can successfully accomplish any purpose they may have for their newly developed evidence-based perspective, whether that be an academic research paper or the construction of a product or process plan.

### *Instructional Sequence*

The process for conducting research outlined in this unit is introduced and developed over a series of activities. As students work through these activities they create and compile the various parts of their Research Portfolios. While each part of the unit introduces skills associated with the various steps in the research process, it should be understood that the process itself is recursive and that these steps will be repeated and integrated as students conduct inquiry.

**Part 1** introduces students to the idea of researching to deepen understanding and immerses students in a collaborative process for exploring a topic, choosing an Area of Investigation, and developing a detailed frame for their research plan.

**Part 2** addresses essential skills for conducting searches for information based on Inquiry Questions. Skills such as searching for, annotating and making notes on sources needed to answer Inquiry Questions. Introduced here, these skills will be developed throughout the remainder of the unit.

**Part 3** focuses students on the strategic close reading and evidence-based claim-making skills for analyzing key sources in order to develop a deeper and comprehensive understanding of their Areas of Investigation.

In **Part 4**, they review and evaluate their materials and analysis, refining their Inquiry Questions and extending their research where necessary—returning to the skills introduced in Parts 2 and 3.

**Part 5** supports students in organizing their research and synthesizing their analysis in order to develop an evidence-based perspective of their Areas of Investigation. Students can use this perspective and Research Portfolio for creating a range of final products.

## HOW THIS UNIT MIGHT BE EMBEDDED IN CONTENT-BASED CURRICULUM

Along with the research process and the Research Portfolio, the topics students explore and investigate make up the third component of the unit. This unit has been intentionally designed to support student research in a variety of curricular contexts. The activities introducing the research process and the materials that guide and construct the Research Portfolio can be used regardless of the subject matter students choose or need to investigate, or their purposes for that investigation.

Depending on their needs and goals, teachers can connect the instruction of this unit to texts and topics they are covering in their English classroom, as well as those that students are learning in other academic and technical disciplines.

Similarly, this unit outlines, develops, and supports a research process leading to an evidence-based perspective and a Research Portfolio that students can use for a variety of purposes, from a thesis-driven academic paper or presentation, to a design plan for constructing a house or industrial menu, to informing personal or community decision making.

The unit is also designed to support the simultaneous research of students into different Areas of Investigation and even topics. It is recommended, however, for coherence and mutual support and enrichment, that students all explore a general topic, choosing different, but related, Areas of Investigation within it. Again, this general topic can be connected to a variety of larger curricular contexts, from a novel to interdisciplinary subjects.

To support teachers and students in choosing, connecting and exploring topics, this unit can be connected with any of the OE Topic Resource Repositories.



## OE TOPIC RESOURCE REPOSITORIES

Teachers can choose among many approaches for integrating the instructional framework and materials of this unit into the topical context of their class. The unit is designed for adaption to the various contexts in which teachers want to develop their students' research proficiencies. Teachers can also choose whether to have their entire class investigate different areas within the same general topic, or allow students to explore any topic they want. Choosing among these various options depends on the purposes teachers have for their students' research, the literacy proficiency and interest of their students, and the goals teachers have for wider curricular context.

Perhaps the richest class experience would be one in which all students explore the same topic, each determining separate areas or aspects of that topic to investigate. This will provide a coherent learning experience and allow students to explore and build on each other's knowledge.

Approaching the development of research proficiencies in this way is modeled and supported by the OE Topic Resource Repositories. These repositories model how topics can be presented to students. They provide narrative introductions and possible Inquiry Questions to stimulate student interest and thinking. They articulate various directions students could explore within the topic and provide some pre-selected sources and model tools to support instruction of the research process. Teachers may choose to use these Topic Resource Repositories to support their instruction or could take a similar approach with another topic. Places where the repository resources can be used are indicated in the unit plan. Regardless of approach to topic selection, it is important for teachers to review and evaluate the sources students find and analyze to make sure they are of appropriate complexity and richness.

## HOW THIS UNIT TEACHES VOCABULARY

This unit draws on a variety of strategies for teaching academic and disciplinary vocabulary. The primary strategy is the way critical disciplinary vocabulary and concepts are built into the instruction. Students are taught words like "analyze," "perspective," "questioning," and "criteria" through their explicit use in the activities. Students come to understand and use these words as they think about and evaluate their research and analysis and those of their peers. The handouts and worksheets play a key role in

this process. By the end of the unit, students will have developed deep conceptual knowledge of key vocabulary that they can transfer to a variety of academic and public contexts. The activities also provide many opportunities for academic vocabulary instruction. Many of the activities focus directly on analyzing the way authors use language and key words to develop ideas and achieve specific purposes.

## HOW THIS UNIT ALIGNS WITH CCSS FOR ELA/LITERACY

The instructional focus of this unit is on building student proficiency in a process for conducting research: developing and refining Inquiry Questions; finding, assessing, analyzing, and synthesizing multiple sources to answer those questions; and organizing and using evidence from those sources to explain understanding in ways that avoid plagiarism. As such, the unit primarily aligns with:

**W.7** (*Conduct research projects based on focused questions, demonstrating understanding of the subject under investigation*);

**W.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*), and

**W.9** (*Draw evidence from literary or informational texts to support analysis, reflection, and research*).

This process involves key moments of both collaboration and independence. As the unit leads students through structured collaborative processes for initiating and refining inquiry, it develops their ability in **SL.1** (*Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively*). At other moments, students are alone in their search for and analysis of sources, building their proficiency for **RI/RL.10** (*Read and comprehend complex texts independently and proficiently*).

The task of writing from researched sources is an important part of larger writing processes. Thus, the unit develops student ability in key aspects of the production of writing expressed in the expectations of **W.4** (*Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience*) and **W.5** (*Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach*). And as they strategically write

organized analysis, eventually building to a written evidence-based perspective, students develop their ability for **W.2** (*Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content*).

Students develop these skills throughout the unit through direct instruction and guided practice, and they are assessed continuously through activities, graphic organizers, and written products.

As students develop these primary targeted CCSS skill sets, they also practice and use related reading skills from supporting CCSS. Throughout the research process, they read key sources closely and analyze textual detail to answer their Inquiry Questions, particularly building their growing proficiency for:

**RI/RL.1** (*Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text*);

**RI/RL.2** (*Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas*);

**RI/RL.4** (*Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone*);

**RI/RL.6** (*Assess how point of view or purpose shapes the content and style of a text*); and

**RI/RL.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*).

## SOURCES OF THIS UNIT INSTRUCTION

The instructional ideas contained in this unit are presented as our contribution to the national effort to prepare all US secondary students for college and career readiness. We intend that these principles, activities, tools, and strategies will be taken up, adapted, and improved upon by the educators who use them. While we take full responsibility for the content of the unit, and recognize that mentioning our key sources in no way implies their endorsement of that content,

we would like to acknowledge some important influences and reference points for this work: the students and colleagues who contributed to the classroom experiences of our development team; the Common Core Standards; the PARCC ELA Curriculum Frameworks; the EQuIP Quality Review ELA Rubric; and the research on text complexity and text-dependent questioning from Student Achievement Partners.

## DEFINITION OF TERMS USED IN THIS UNIT

**Area of Investigation:** a particular theme, question, problem, or more focused sub-topic within the general topic that warrants investigation.

**Inquiry Question:** questions posed by researchers about their Areas of Investigation to be answered through inquiry.

**Inquiry Path:** groups of Inquiry Questions developed to guide investigation. Each Inquiry Path has a name or title that is the theme of the group of questions. It can also be a more general question that summarizes the specific questions within the group.

**Research Frame:** a written document comprised of the topic, the Area of Investigation, the Inquiry Paths and all the Inquiry Questions within each Inquiry Path. It is the tool that will guide the student throughout the research process.

**Research Portfolio:** the binder or electronic folder where students physically or electronically store and organize all the material related to their personal research.

**Research Plan:** a document presenting the strategic process students follow to guide them through the various stages of inquiry.

**Topic:** the general topic chosen for class exploration.

**Topic Resource Repository:** a repository of information on a topic including a general description, possible Areas of Investigation, source locations and model sources provided by OE to facilitate and support teaching and learning of the research process.





# HOW TO USE THESE MATERIALS

This unit is in the format of a Compressed File. Files are organized so you can easily browse through the materials and find everything you need to print or e-mail for each day. The materials are organized into folders:

## RESEARCH UNIT PLAN

- The Research Unit Plan (outlines the instructional activities of this unit and provides instructional notes)
- Teacher Research Unit Guide (lists the sequence of unit activities and related materials)
- Student Research Plan (guides students through the main steps of the research process)

## HANDOUTS

This folder contains all of the supporting handouts that guide students through the research process, explaining key processes for students and teachers. It includes the Research Criteria Matrix that aids teacher and student evaluation of student proficiency.

## TOOLS

This folder contains all of the supporting tools that help students build their Research Portfolios, aiding student thinking, habits, and analysis of researched information. Annotated Tools are provided to aid teacher instruction.

## CHECKLISTS

This folder contains all of the checklists that guide students and teachers in the process of evaluating their work based on specific qualitative criteria.

**TOOLS** and **CHECKLISTS** have been created as **editable PDF forms**. With the free version of Adobe Reader, students and teachers are able to type in them and save their work for recording and e-mailing. This allows students and teachers to work either with paper and pencil or electronically according to their strengths and needs. It also allows teachers to collect and organize student work for evaluation and formative assessment.

## TOPIC RESOURCE REPOSITORIES

Teachers can elect to use Topic Resource Repositories to support the instruction of the Research Unit Plan. The repositories contain information and sources for stimulating and supporting student research within a broad topic. The repositories contain:

- Information for framing the topic
- Possible Areas of Investigation
- Model Inquiry Questions
- Common source texts for instruction
- Models of Unit Tools

Activities where repository texts should be used are specifically referenced in the Unit Plan.





## INTRO

# INTRODUCTION TO UNIT

**OBJECTIVE:**

The teacher explains how critical readers use inquiry and research to deepen their understanding and develop an evidence-based perspective on a topic. Students are introduced to the purposes, the process, and the materials of the unit.

**MATERIALS:**

Teacher Research Unit Guide  
Student Research Plan

### TEACHER RESEARCH UNIT GUIDE

<b>INTRODUCTION</b>	Introduction to Unit
<b>I. INITIATING INQUIRY</b> <i>Students determine what they want to know about a topic and develop inquiry questions that they will investigate.</i>	1. Exploring a Topic
	2. Conducting Pre-searches
	3. Vetting Areas of Investigation
	4. Generating Inquiry Questions
<b>II. GATHERING INFORMATION</b> <i>Students find and take notes on sources that will help them answer their inquiry questions and define the scope of their investigation.</i>	1. Planning for Searches
	2. Assessing Sources
	3. Making and Recording Notes
	4. Building an Initial Research Frame
	5. Conducting Searches Independently
<b>III. DEEPENING UNDERSTANDING</b> <i>Students analyze key sources to deepen their understanding and answer their inquiry questions.</i>	1. Selecting Key Sources
	2. Reading Sources Closely
	3. Discussing Types of Claims
	4. Writing Evidence-Based Claims about Sources
<b>IV. FINALIZING INQUIRY</b> <i>Students synthesize their information to determine what they have learned and what more they need to know about their area of investigation. They gather and analyze more information to complete their inquiry.</i>	1. Addressing Inquiry Paths
	2. Organizing Evidence
	3. Evaluating Research
	4. Refining and Extending Inquiry
<b>V. DEVELOPING AND COMMUNICATING AN EVIDENCE-BASED PERSPECTIVE</b> <i>Students review and synthesize their research to develop and communicate an evidence-based perspective on their area of investigation.</i>	1. Reviewing Research Portfolios
	2. Expressing an Evidence-Based Perspective
	3. Writing a Bibliography
	4. Communicating an Evidence-Based Perspective