Paige Jaeger
paigejaeger@gmail.com
Olga M. Nesi
omn31@yahoo.com

REAL-LIFE RESEARCH: PROJECT RUNWAY MAKEOVER MODEL

Real-life research is incredibly varied. We research cars. We research lawn problems. We research child behavior problems, health issues, possible vacation destinations, and prices to stretch our budgets. No two scenarios are ever alike, and no two health issues should be assumed to be the same. That is reality, and that is a picture of what the Common Core State Standards call "real world problems."

So if real-world problems are never the same, why are so many research activities designed in a one-size-fits-all fashion? Why do students have to fact-fetch for fill-in-the-blanks, when they have been asked to "solve real-world problems" and "research to build and present knowledge"? These low-level no-thought "research" tasks have got to go, and school librarians could be hosting lunchtime professional development shows dubbed "Research Project Runway Models—Let us make over your unit." We (school librarians) should be in the transformation business. We should be transforming old information units into student-centered, inquiry-based learning adventures that encourage students to build knowledge, rather than merely collect information.

The Common Core State Standards (CCSS) call for rigor and relevance, and fill-in-the blank research packets are neither rigorous nor relevant. A "packet" is a teacher's assignment and a teacher's creation. The Common Core State Standards call for students to "conduct short research projects to answer a question…generating additional related, focused questions…" (see sidebar).

So, if the CCSS ask the students to generate questions, then why are we predefining the questions for our students' research? Therein lies the issue of why we need research makeovers. It is by teachers' letting go of control that ownership transfers to the student and research becomes relevant to the

WHEN TEACHERS EMBARK ON STUDENT-CENTERED INQUIRY-BASED RESEARCH PROJECTS, ASSIGNMENTS BECOME LEARNING ADVENTURES.

learner. It is by asking a difficult inquiry-based essential question that we spawn a rigorous and relevant learning task aligned with Common Core standards related to research for writing.

When teachers embark on student-centered inquiry-based research projects, assignments become learning adventures, rather than information packets that have to be completed for a grade. When research is performed with the goal of sharing knowledge, the purpose is more than a grade. Only through teachers' letting go will students be empowered to define direction and investigate. Otherwise, we are operating in a paradigm of fact-fetching. Fact-fetching instruction was born in the Industrial Age when information was difficult to find and the learning goal was merely to teach us how to discover information. We must move beyond mining data and into transforming data into meaning. Students need to investigate, synthesize, conclude, and share their knowledge. They need to reflect on the process and do it

"routinely," as the Common Core says in writing for information standards 6, 7, 8, 9, and 10.

To help teachers make over their research packets, we can suggest a few steps:

1. Admit the old paradigm is outdated.

2. Adopt a goal of knowledge, rather than information.

3. Adopt a role of "learning concierge" and get ready for some messy learning adventures.

4. Package your instructional goals (curriculum learning targets) in questions that can be answered only through an investigation.

5. Let the students brainstorm their own wonder and investigation questions, rather than giving learners predefined packets.

6. Embed an element of choice within the project so that the students will "own" the task.

7. Connect with emotion somehow, to foster interest and care in the project.

8. Don't cheat students out of the opportunity to share their knowledge with others.

If students have no opportunity to share their knowledge products, then educators are not meeting the Common Core State Standards and are cheating students out of the experience of feeling validation of their research and creation tasks.

From Information Product to Inquiry Knowledge Product

We are all familiar with the types of "projects" that result in information end products. Students are either assigned a topic or select one from a preapproved list. *What* topic is selected or assigned turns out to be largely irrelevant. Students might be asked

RESEARCH TO BUILD AND PRESENT KNOWLEDGE

Selection of Research-Related Common Core Writing Standards <www.corestandards.org>

CCSS.ELA-LITERACY.W.7.7

Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.

CCSS.ELA-LITERACY.W.7.8

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.

CCSS.ELA-LITERACY.W.7.9

Draw evidence from… informational texts to support analysis, reflection, and research.

to read about a scientist and write about that scientist, or read about an animal and write about that animal, or read about an ancient civilization and write about that civilization. The very interchangeability of the topics is a clear indicator of the fact that the assignment will result in copy and paste work from the student. The demand for more specific information (i.e., when the scientist was born, where she lived, what she contributed to science, when she died, or what the animal's habitat and eating habits are) does nothing whatsoever to increase the rigor of the task or get the student to a deeper understanding of the content.

It might easily be argued that this hyper-definition of what specific information to include in the "report" serves only to further distance the student from the task. When students are given a list of questions to answer through "research," we deprive them of figuring out what they want to know about a topic and virtually ensure that when they read, they will skim for answers—versus engaging with the text deeply enough to generate their own questions about what they have read so that they can research their topics further. While it is one thing to create a purpose for reading by offering some guidance ahead of time, it is altogether another thing to limit what a student reads deeply to what an educator has predefined as important to know about a topic. In point of fact, if the predetermined questions are fact-retrieval ones, students may well be able to answer them without having read at all! A task that requires minimal student engagement will invariably result in information retrieval completed with little or no learning whatsoever having taken place.

In this scenario, even if we are enlisted to teach note taking, resource location and evaluation, database use, and bibliographic citation, deeply meaningful learning is prevented—by the assignment itself—from entering the scene. Clearly, this situation results from the assignment's not being designed with *inquiry* in mind. The most crucial phase of inquiry is completely missing in an *information-focused* assignment.

Figure 1. Example of an assignment transformed from information-focused to inquiry learning.

	TRADITIONAL	RE-CRAFTED
ASSIGNMENT	Research the types of jobs that child laborers held in the United States at the turn of the century. Be sure to describe each job and what it entailed.	EQ: How do the various issues surrounding child labor directly impact our perception of it as a problem? In what ways are the solutions we propose dependent on our perceptions? Investigate, synthesize, and conclude. For this assignment, you will investigate child labor (and the issues that surrounded it) in the United States at the turn of the century. To do this investigation, you will locate and read books, articles, and primary sources on child labor and the different perceptions people had of it at the time. You will then write an essay that argues your position on child labor. As part of your essay, you are required to: clearly state your position, discuss competing views/perceptions, support your position with evidence from your research and conclude.
SKILLS THE LIBRARIAN CAN TEACH	• Database use • Locating resources on the library's shelves and online • Resource and information evaluation • Note taking • Citation	• Database use • Locating resources on the library's shelves and online • Resource and information evaluation • Note taking • Citation • Organizing information to facilitate the making of a claim • Making a claim from gathered and organized information • Evaluating evidence to identify the best possible evidence to support the claim • Gathering and organizing evidence from multiple perspectives • Considering the role of perspective on the making of claims
RESULTING PRODUCT	A "report" on the types of jobs that child laborers held in the U.S. at the turn of the century, with a description of each of these jobs.	Class activity: Evidence-based discussion and debate. You will choose to personify critical players of the Industrial Revolution and will be called upon to testify. Writing Assessment: Essay (based on child labor "evidence") in which a claim is made and supported by information synthesized from multiple resources, and viewpoints.

An inquiry assignment requires students to do something with the information that they have gathered and organized. Namely, it requires them to synthesize information and make some claim with it. Synthesis constructs new understandings and knowledge that students did not have when they started. Until the assignments and tasks change, the end product will remain fact presentations, and school librarians will be stuck teaching only information-gathering skills and the express phase of inquiry. Only when the task is changed does our instructional role become *critical* and the skills we teach expand to include critical-thinking skills. (See figure 1 for an illustration of how a re-crafted task results in deeper instruction and in an *inquiry investigation*.)

What's the Difference Anyway?

The single greatest difference between traditional and re-crafted assignments is that the latter require the students to provide the "so what?" to go with the investigation. While both assignments ask the students to investigate a topic, the traditional assignment ends once the investigation is done and the assignment questions are answered. The re-crafted assignment compels students to synthesize information so that they can make some sensible claim based on it and support that claim with the best possible evidence. Additionally, students are asked to consider multiple perspectives on the topic rather than merely being asked to describe something.

Investigation for investigation's sake is largely a pointless activity—one completely devoid of engagement and meaningful learning. It is only when students engage with the information they have gathered, by making a claim from it, that true research has taken place. Regurgitation of the results of an investigation does not research make. An opportunity to share their new understanding reinforces students' engagement and ownership of their learning.

An additional difference is that in the re-crafted assignment scenario, the role of the school librarian is greatly expanded. The additional skills the re-crafted assignment allows us to teach are critical for students to learn. These are the skills at the center of all the CCSS reading and writing standards (for ELA as well as social studies and science). In this new assignment scenario, we are instructional leaders in our buildings, able to assist all our colleagues with both crafting more rigorous assignments and determining the specific instruction that must follow from this increase in the rigor of tasks.

Conclusion

An old proverb states: "In all your getting, get understanding." We love that piece of simple advice, as *understanding* is the result of deep discovery. It is the byproduct of synthesis and application. Only through understanding do learners recall, discover, comprehend, and advance. If all our students are "getting" is facts, then—to paraphrase 1 Corinthians—we of all people are to be pitied. Our efforts will not equip students to understand and improve—only recall.

We are educating the next generation that will run the world. For that reason we need students who can wonder, investigate, synthesize, conclude, improve, and share their findings. This inquiry-based learning is how we will create college- and career-ready young minds. Through participation in this learning will students change the world for the better. This outcome is how we will feel rewarded. This is a real-life makeover. Let's run with it.

Paige Jaeger *is a professional development consultant in Saratoga Springs, New York. She received the Distinguished Service Award from the School Library Systems Association of New York State in 2013. Her articles include "Hear Ye, Hear Ye: A Dozen Messages from the New York Common Core Crier" in the Jan/Feb 2014 issue of* Knowledge Quest; *"Close Encounters of the Complex Kind" in the January 2014 issue of* Library Media Connection; *"The Wrong Villain" in the January 2014 issue of* School Library Journal; *and "Connecting and Collaborating with CCSS: The Six Shifts" in the November 2013 issue of* School Library Monthly. *She also coauthored (with Mary Boyd Ratzer) the book* Rx for the Common Core *(Libraries Unlimited 2014). She is an AASL member and serves on the AASL Common Core Task Force. She is also a council member for NYLA.*

Olga Nesi *was a middle school librarian for eleven years, prior to which she was a classroom teacher for six years. She is currently a library coordinator in a large city school district. She authored the chapter "What Is the 'Core' of the Common Core State Standards?" in* Inquiry and the Common Core: Librarians and Teachers Designing Teaching for Learning *(Libraries Unlimited 2014). She also wrote "In It Together: A School and Public Librarian Find Common Ground on the Common Core" for the October 2013 issue of* School Library Journal. *Olga is a member of AASL and serves on the AASL Common Core Task Force.*