

High School to College Transition

Sharing Research with Teachers



“A challenge exists for teacher librarians in helping teachers see and appreciate the opportunities for instruction in the library to prepare students for academic success.”

JEAN DONHAM AND DENISE REHMKE

The professional literature has made teacher librarians acutely aware of the skills, knowledge, and dispositions that students need for successful transition from high school to college.

While there are many articles in the library literature on preparing high school students for college, one particularly helpful example is by Patricia Owen (2010), who provides a transition checklist for high school seniors that includes such skills as conducting effective searches, evaluating information for its authority, “regrouping” when search attempts fail, synthesizing information, and avoiding plagiarism, along with others that spell readiness for collegiate work. In short, the literature reflects an agenda for teacher librarians related to teaching information skills and dispositions for student success after high school.

A PERCEPTION GAP

A challenge exists for teacher librarians in helping teachers see and appreciate the opportunities for instruction in the library to prepare students for academic success. Current trends tie classroom teachers to “covering” content in their respective disciplines rather than teaching the inquiry skills and dispositions emphasized in the library literature. In short, the messages that librarians hear about preparing students for college and career may not always reach classroom teachers. In response to this challenge, high school librarians in the Iowa City Community School District have been working to inform classroom teachers about the place for inquiry skills in their college readiness work. While they could point to many successes with their efforts, their message still needed to be broadened in its reach. To extend that reach to more teachers, we designed a two-segment half-

day workshop for high school teachers to address inquiry-based research and college expectations for students. Approximately 50 teachers attended the session, representing a variety of disciplines.

WORKSHOP SEGMENT 1: MENTAL MODELS OF INQUIRY

The first segment of the workshop focused on students’ mental models of writing a research-based paper. This segment was grounded in the classic work of Judy Pitts, who studied high school students’ mental models of engaging in a research paper assignment (Pitts, MacGregor, & Stripling, 1996). She found that the high school students she studied lacked an understanding of the research process, as well as a disposition for inquiry. Those students chose topics about which they already knew as much as they would need to know, topics they had used previously, or topics they thought would be easy. Perhaps more importantly, they chose topics rather than inquiry-based questions. In short, she found little authentic inquiry in the students’ work;

indeed, those students seem similar to many of our local high school students. In the workshop, the teachers showed they wanted their students to meet high academic expectations. It was posited that the rigor of a student’s work may be related to his/her mental model of the inquiry process. In concrete terms, two student approaches were described for a research assignment, as follows.

One student understands that task to look like this:

She picks a marine biology topic—sharks. She goes to the World Book Online, finds an article about sharks, gleans information, and writes her report.

A second student understands that task differently:

He might be curious about stories he has heard about people swimming in the ocean and being stung by jellyfish. He wonders how often this really occurs. Is it more common than it used to be? Are jellyfish stings dangerous or just painful? What causes jellyfish to sting? Are there different types of jellyfish—are some more likely to be stingers? He begins to search for information to respond to these questions.

This distinction in mental models set the stage for the workshop. To develop a more accurate mental model of the research process, teachers were introduced to Carol Kuhlthau’s research-based information-seeking model (Kuhlthau, 2004). While there are several inquiry models in the library literature, this classic model was chosen because of its research basis and because it was identified as an effective way to focus attention on aspects of the process that are too often overlooked, especially the exploration stage (see Figure 1).

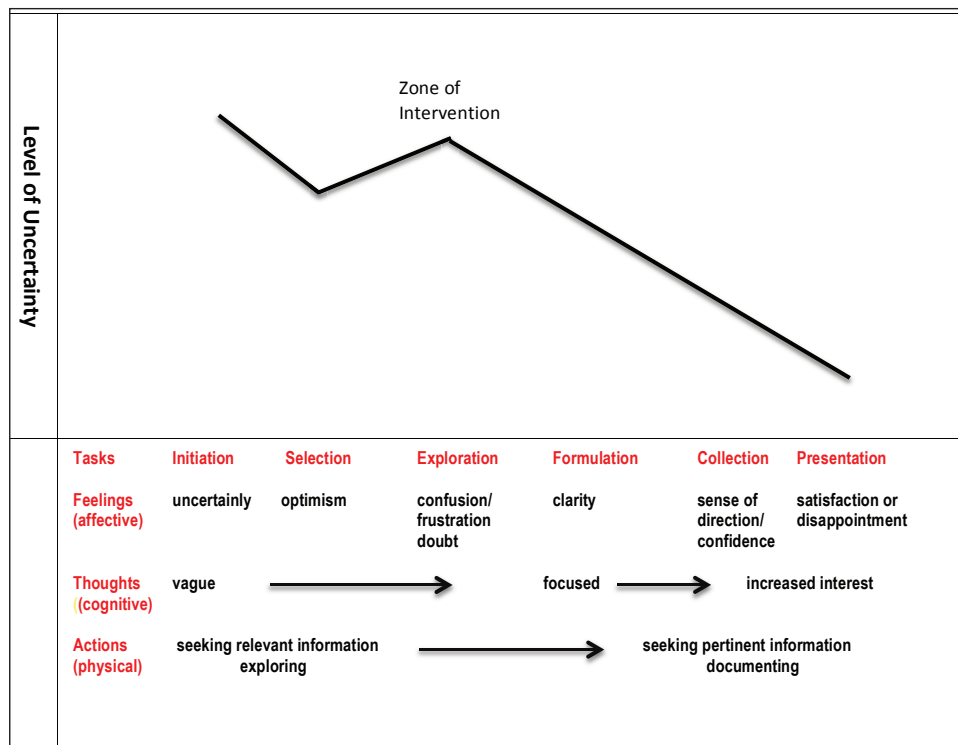


Figure 1. Kuhlthau information Process Model

Also, this model emphasizes the affective domain and underscores the importance of uncertainty, suggesting that if there is no uncertainty, there is no real inquiry. For high school students, the acknowledgment of uncertainty as a normal state at the beginning of an investigation is both assuring and instructive; it helps them realize that inquiry begins with not knowing. Too often this state of uncertainty is so uncomfortable that young researchers seek to avoid it and choose a “safe” path. The high school teachers were encouraged to emphasize the fundamental importance of uncertainty for their students. Further, this model identifies a point of intervention to indicate that it is normal to seek assistance along the way; again, too often high school students assume that they ought not to seek assistance, perhaps because it would acknowledge their need for help.

WORKSHOP SEGMENT 2: COLLEGE ASSIGNMENTS

In this segment of the workshop, attention was focused on actual college assignments and the expectations that faculty in first-year courses hold for their students. This approach was based on a content analysis study of 41 assignments from first-year courses in Iowa colleges and universities (Donham, 2014). In that content analysis, quotations from assignments had been categorized to identify the skills and learner dispositions faculty expect in their first-year college students. In the workshop, examples of these categorized quotations were shared, so participants could then ask themselves the extent to which they are providing their students experiences to prepare them for these expectations. (For additional information, see the PowerPoint, “College Ready? What Do First-Year College Assignments Tell Us?” available at teacherlibrarian.com.) Exam-

ples of themes shared with faculty are illustrated in Table 1. For each theme, teachers received exemplary quotations from college assignments along with suggestions for preparing their students. Also, for each category, teachers reflected on their current practice as to whether they might want to re-

wise it to better ready their students. For the first two themes, “initiating the inquiry” and “exploring,” discussion ensued about how these high school students craft assignments, with questions like, “How directive am I regarding topic selection?” and “To what extent do I allow students time

to explore a topic to build background knowledge?” Teachers were also asked to speculate: If their students did more background building before deciding on a topic or a research question, might their questions be better informed and thereby more cognitively complex? For the “collecting information” theme,

Table 1. College Assignments

Category	Quotation Exemplars (Donham, 2014)	Advice to Teachers and Teacher Librarians
Initiating the inquiry	“Your topic can be anything—as long as you find it compelling and exciting—something you really want to find out about, perhaps something that affects you personally.”	Incrementally increase the open-ended character of assignments to challenge students to define their topic. Assign students to provide a reflection on how they arrived at their chosen topic.
Exploring	“Spend some time exploring a topic of interest to you.”	Share the Kuhlthau model of the research process to underscore the exploratory stage and its accompanying uncertainty. Ask students to keep a log reporting their exploration to be submitted along with their final product.
Collecting information sources	“There are many sources that may be useful for this project. Wikipedia, ask.com, etc., are not among those. You can use Web resources, but they need to be legitimate sources, not online encyclopedias or your cousin’s blog.”	Teach students criteria for evaluating sources, such as purpose, authority, timeliness, and scope.
Processing information	“This paper is more than a report.” “You should quote the original source only when it is awesome.”	Construct assignments so that students must go beyond simply reporting or summarizing information they have located. Use organizers to help students synthesize information before they write. Teach direct lessons on how to paraphrase.
Supporting with evidence	“Make use of the secondary material you have explored in developing an argument.”	Develop lessons on stating a defensible thesis and supporting it with evidence from authoritative sources.
Curiosity	“This is an opportunity for you to learn more about a topic that you have wanted to think about and to figure out your views on the topic or your recommendations for action.”	Provide opportunities at the beginning of an assignment for students to generate lists of possible topics and questions to meet the assignment rather than requiring immediate decisions on a topic.
Open-mindedness	“It is easy to have a reflexive opinion about an issue; it is more challenging to strive to comprehend the various perspectives on that issue and to advocate by respectfully engaging others’ views.”	In thesis-driven writing, encourage students to introduce conflicting ideas. Express the possibility to revise one’s thesis after new information is found.
Perseverance	“Thorough research requires that you look at many, many more sources than you will finally use.”	Require a list of resources consulted but not referenced in the paper to “give credit” for exploring for background knowledge”

many college faculty had indicated that they expected scholarly sources, so the high school teachers discussed how they define quality sources and how they might help students internalize quality criteria. For the categories related to “processing information” and “supporting with evidence,” teachers in the group again reflected on their crafting of assignments to increase the likelihood that students must go beyond simply restating what they find in sources of information to integrating ideas. This led to discussion of extended direct quotations, as well as extensive paraphrasing by students. The quotations that came under the headings of “curiosity” and “open-mindedness” prompted discussion of uncertainty and the need to help students accept this uncomfortable state. “Perseverance” was a category that teachers readily recognized as problematic for many of their students. There was general agreement that teachers need to support perseverance in their students and that often a librarian can be a key to helping redirect or recharge a student’s quest.

Teachers were grouped by discipline and together examined sample first-year college assignments to determine what skills and dispositions faculty expected of their students. The groups worked together to respond to these questions:

1. What content knowledge must the student have to complete the assignment?
2. What assumptions does the professor make about students’ knowledge of the process of research?
3. What attitudes or dispositions does the professor assume or expect?

What lessons or assignments might you see as helpful in preparing students for this college assignment?

Figure 2. College Readiness Assignments/Lessons

1. Arriving at their own line of inquiry: What lessons or assignments are we giving student experience at:

- Exploring (to read in print and online for background building, *not* for reporting)
- Experiencing the *uncertainty* inherent in authentic inquiry
- *Reflecting* and wondering what is left to be discovered

Current lessons or assignments	How we might enhance

2. Supporting argument with evidence: What lessons or assignments are we giving student experience at:

- Understanding what constitutes evidence and locating *authoritative* evidence
- Learning to manage *bias* and *special interest* in reported information

Current lessons or assignments	How we might enhance

3. Developing self-reliance: What lessons or assignments are giving student experience at:

- Experiencing (more than once) *large-scale* research projects to organize their work strategically
- Scaffolding to break down and *schedule work* for a major project

Current Lessons or assignments	How we might enhance

Finally, teachers were asked to think about their own assignments and consider how they prepared students for the expectations they saw in sample college tasks. Teachers, working in small groups, engaged in discussion

using the format shown in Figure 2. Their discussions yielded insights into how they might improve their own assignments and scaffolding to develop college-ready skills and dispositions in their students.

The workshop concluded with asking teachers to identify new perspectives gained from the day, think about colleagues with whom they aimed to continue the conversation, and share one action they would take based on the workshop.

REFLECTIONS

Follow-up with teachers participating in the workshop revealed several insights. Many participants noted that the distinction between reporting and researching was not something they had consciously considered but was clearly something they would now look for in the assignments they posed to students, reframing expectations. The notion of uncertainty as an important component of the research process was also a new perspective, and something that needed acceptance and affirmation in their classroom environments. Several noted that it is important to stress the concept of audience to students—that the envisioned or intended audience of their writing should be someone other than the teacher. Finally, the idea that college students were often required to write research papers—that the research paper is still supreme at that level—might influence the amount of writing required in high school, as opposed to the increasingly prevalent multimedia projects and/or presentations.

One participant wrote, “I appreciated the opportunity to discuss with my department colleagues and to strategize about how we can tweak assignments to give students the opportunity to experience uncertainty and to focus on some aspects of the research process that we currently gloss over.” Another stated, “Knowing how to select an ap-

propriate research topic is important, but something I seldom allow much time for. I plan to work that into one of our research projects.”

This workshop provided an opportunity for a large, diverse group of educators to learn about and discuss their expectations of students’ performance in light of the expectations these same students will experience as college students by their professors. With this shared awareness, teachers and teacher librarians may work to modify and better integrate relevant experiences to help students grow in skill and confidence. Also, in this way, the workshop allowed an authentic learning opportunity for teachers to support teacher librarians as they begin to tackle the agenda for teaching information skills and dispositions for student success after high school and help teachers to appreciate the opportunities for instruction in the library to prepare students for academic success.

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Jean Donham, Ph.D. is retired professor of school library studies, University of Northern Iowa. Previously, she led the library/technology program for the Iowa City [Iowa] Community School District; held a position as tenured associate professor at the University of Iowa School of Library and Information Science; and directed the library at Cornell College, a selective liberal arts college in Mount Vernon, Iowa. She has published extensively in inquiry based learning and high school to higher education transition. Email: jeandonham@gmail.com

Denise Rehmke is the district library coordinator in the Iowa City Community School District. Email: Rehmke.Denise@IowaCitySchools.org