



FEATURE

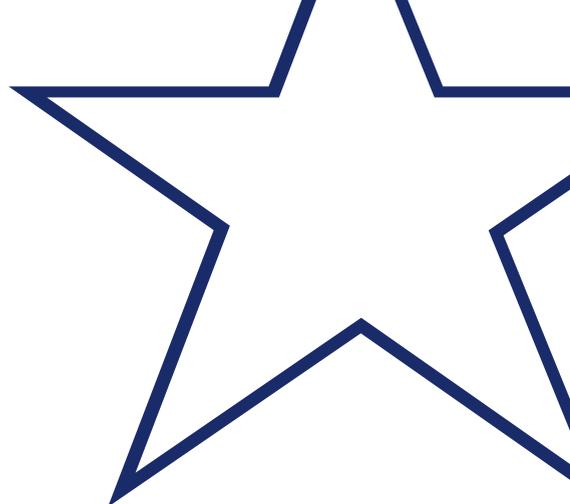
★ ASK—THINK—CREATE: ★

THE PROCESS OF INQUIRY



Valerie Diggs

vdiggs@comcast.net



Inquiry provides a framework for learning.

To become independent learners, students must gain not only the skills, but also the disposition to use those skills, along with an understanding of their own responsibilities and self-assessment strategies. Combined, these four elements build a learner who can thrive in a complex information environment.

AASL Standards for the 21st Century Learner (AASL 2007, 2)

Today's students find it difficult to develop an understanding of what it is they need to know, and more importantly, why they need to know it. Framing this "need to know" has been called by various names, such as *inquiry*, *inquiry process*, *essential questions*, *knowledge construction*. Who defines inquiry or question development? How? When? These questions perplex our profession.

Indeed, I am asked many questions throughout the course of a day in the Chelmsford High School Learning Commons. Some are simple: "When does this block end?" or "Where can I find a book on..." or (more importantly for students) "Is the Common Grounds Café open tomorrow morning?" Are these inquiries? Yes. They *are* a form of inquiry—student-centered questions, for sure.

Inquiry, however, goes much deeper than casual questioning. The *AASL Standards for the 21st-Century Learner* place the inquiry process as essential—a Common Belief: "Inquiry provides a framework for learning" (2007, 2). As Barbara Stripling describes it, "Inquiry is a process of learning that is

driven by questioning, thoughtful investigating, making sense of information, and developing new understandings" (2008, 50). Asking the right questions is at the root of the inquiry process.

However, it is not only the development of the question, but the *why* of the questioning that is critical. *Why* do I need to know this? *How* will knowing this make me a better learner? A better student? A more responsible member of society?

And for our profession, how do we empower our students with the skills and dispositions necessary to develop the understanding of what it is they need to know and why they need to know it? My answer: through thoughtfully crafted content-area experiences.

Witness a Spanish Honors Six class investigating the current immigration policy in the United States. What is it they need to know about our policies, and why should they even want to know? These senior students came with their classroom teacher interested and ready to question and learn. Even better, they came knowing *why*

they needed to do just that. How did this come about? Why was I not facing a group of disinterested students with the typical "can't wait to get through this assignment" look on their faces? Prior to their visit, they spent time with their classroom teacher discussing their own roots—a personally meaningful hook to get them interested in the project. They read and discussed an account of illegal migrant workers in California in the 1950's, "Cajas de Carton" ("Cardboard Boxes").

Then they considered four different positions that the United States could take regarding the problem of immigration—and were asked to devise their own fifth option. This activity met the intent of the AASL learning standards indicator, "Use prior and background knowledge as context for new learning (2007, 4). The learning and engagement with the topic continued when the students listened to three different songs about immigration and saw the respective music videos. They discussed the songs and videos in small groups, and voice recordings were made of the discussions for future reference.

Their classroom teacher's goals included having students "consider immigration seriously and individually" and "writing something" (McIvor 2009). They were then left to develop answers to their own questions. In McIvor's words, "I did not want to prejudice them in any way, and gave them free rein to research and write. Seniors are good thinkers, at least the ones I have had in honors classes, and I wanted them to research any aspect of immigration they wanted to and then write about it. The papers were all interesting and well done. I was glad I left the topic open-ended. That way I had thirty unique papers to read and not thirty of the same thing" (McIvor 2009). Not only did we have unique papers, but we had students who were invested and interested in what they were asked to investigate as they followed the natural progression from information to inquiry.

All of the activities leading up to the writing helped the students refine and define exactly what they needed to know and why they needed to know it. From the short story to the songs to the brainstorming of alternative positions taken by the United States on future immigration policy, these senior Spanish language students were well prepared to answer their own questions.

Organizing inquiry-based units around question development is described by Wiggins and McTighe as essential to providing "...teacher and students with a sharper focus and better direction for inquiry." By developing personally meaningful questions, we "...render the unit design more coherent and make the students' role more appropriately intellectual" (1998, 27). This pedagogy mirrors standard 1 of the AASL *Standards for the 21st-Century Learner*, "Inquire, think critically, and gain knowledge," and in particular indicator 1.2.1, "Display initiative and engagement by posing questions and investigating the answers beyond the collection of superficial facts" (AASL 2007).

How can school library media specialists facilitate the development of inquiry-based units? The answer to this question is nothing new, and certainly nothing any library school student or current practitioner hasn't heard time and again: *collaboration*. Collaboration is *not* simply pulling books, or bookmarking websites, or even creating pathfinders. It is sitting down with teachers and saying, "How can *we* improve on this lesson or project or unit so our students can learn not only more, but better?" It is the "we" in this equation that is important. Collaboration improves units by transforming them into inquiry-based units.

It is *our* job, alongside the classroom teacher, to offer our students today the opportunity to think critically and develop personally meaningful questions through inquiry-based units. It is through such experiences that students construct questions to answer that they really want to answer, questions that will lead them to turning information into knowledge and, subsequently, that knowledge into wisdom for a lifetime.

In our newly renovated Learning Commons, a quote from John F. Kennedy sprawls across the group work areas, "We set sail on this new sea because there is knowledge to be gained" (1962). It is with this mindset that we (and I include teaching staff, students, administrators, and library staff) conduct business. Knowledge can be gained only through the process of true and unadulterated inquiry. The inquiry process is crucial to our students' experiences and central to the culture of our space.

If we can make this happen in the Learning Commons at Chelmsford High School, so can you. The inquiry process truly does provide "a framework for learning" (AASL 2007). Above our central information desk are the words, "Ask, Ask, Ask," and in the café area the words "Think" and "Create" appear above the counter seating.

My role as a teaching librarian is to encourage and support teachers in the transformation of ordinary units into inquiry-based units, where generating questions leads to deeper understandings and advances in student learning.

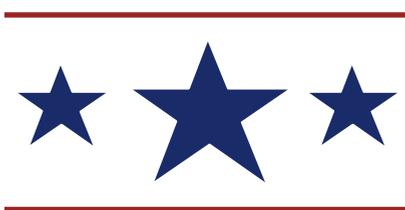
My role as a teaching librarian is to encourage and support teachers in the transformation of ordinary units into inquiry-based units, where generating questions leads to deeper understandings and advances in student learning. Encourage your teachers to make learning meaningful by requiring students to think, ask, and then create. Learning will become meaningful and lasting, and you will have provided your students with a wonderful gift: the ability to think for themselves.

Now, find out what you really want to know by attending the conference and asking your questions over and over again. You are bound to find answers.



Valerie Diggs is the high school library media specialist in the Chelmsford (MA) school district at the newly

renovated Learning Commons. She also serves as the K–12 library director for the district. Her Learning Commons space runs the Common Grounds Café each week, as well as sponsors student talent at special events each month. She is Standards chair for the Massachusetts School Library Association, teaches for Simmons College, and spends much of her summers on the water in remote Eastport, Maine.



Works Cited

- American Association of School Librarians. 2007. "AASL Standards for the 21st-Century Learner." <http://ala.org/ala/mgrps/divs/aasl/guidelinesandstandards/learningstandards/AASL_LearningStandards.pdf> (accessed February 19, 2009).
- Kennedy, John F. 1962. "Address at Rice University on the Nation's Space Effort." <www.jfklibrary.org/Historical+Resources/Archives/Reference+Desk/Speeches/JFK/003POFO3SpaceEffort09121962.htm> (accessed February 23, 2009).
- McIvor, Merrie. 2009. Personal e-mail correspondence. January 7.
- Stripling, Barbara. 2008. "Inquiry: Inquiring Minds Want to Know." *School Library Media Activities Monthly* 25, no.1 (September), 50–52.
- Wiggins, Grant, and Jay McTighe. 1998. *Understanding by Design*. Alexandria, VA: ASCD.

If you are interested in this topic, check out these (and other) related programs in Charlotte:

Guided Inquiry + AASL Standards = 21st-Century Learning Carol Collier Kuhlthau, Leslie Maniotes, & Ann Caspari

Assessment Product: The Why, What, and How Celeste Nalwasky, Cynthia Keller, & Nancy Henry

Data-Driven Collaboration: The Key to Measurable Improvement in Student Learning and Achievement Toni Buzzeo

Reving Up Collaboration and the 21st-Century Learner Leslie Creek & Amy Myers

Learning From Collaboration: Lessons Learned from a Collaborative Research Unit Evelyn Reavis Bussell

Research Matters! Becoming the Key Component in Your School's Research Curriculum Carrie Turner, Theresa Gosnell, & Jane Brawner

Learning Commons, Information Commons, Library Media Center—What's in a Name? Alison Ernar, David Loertscher, & Paul Moser

Library of Congress Professional Development—Teaching with Primary Sources Kathleen McGuigan & Elizabeth Ridgway

Growing Into Inquiry Linda Fox, Mary Ratzer, & Jan Tunison

Implementation and Impact: The Big6 Applied to Tests and Standards Bob Berkowitz & Mike Eisenberg

Avoiding the Bulldozer (or Raking) Approach: Questioning for Research Success Gerry Kawzowicz Solomon

The Big6: Research for K–6 Amanda Ann Jones

Changing; Transforming; Reinventing: A Collaborative Think Tank David Loertscher

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Itâ€™s designed to promote â€˜wholeâ€™ thinking about otherwise discrete or disconnected ideas. 1. Functionâ€™thinking critically about how a â€˜thingâ€™ works. 2. Selfâ€™Making sense of how the thinker relates to the â€˜thingâ€™. 3. Abstractionâ€™Thinking about the â€˜thingâ€™ creatively, or in non-traditional ways. 4. Partsâ€™Seeing the individual parts of the â€˜thingâ€™. In short, they can use this framework (or a simplified version of it) to create their own questions. Some examples? Prompt: Partsâ€™Give examples and non-examples. The downside to using the TeachThought Learning Taxonomy to help students ask their own questions is the relative complexity of the framework, and the extra step of converting prompts to questions. Therefore, itâ€™s better suited to late middle schoolâ€™university settings. The upside? to experience the process of scientific inquiry and develop an enhanced understanding of the nature and methods of science, to hone critical-thinking skills, and. to recognize the role of science in society and the relationship between basic science and human health. NIH Curriculum Supplement for Middle School. Inquiry-based units will include many or most of the following process skills. These process skills should be incorporated into students' instruction as developmentally appropriate. Creating models - displaying information, using multisensory representations. Gathering and organizing data - collecting information about objects and events which illustrate a specific situation. Generalizing - drawing general conclusions from particulars. The process of inquiring begins with gathering information and data through applying the human senses -- seeing, hearing, touching, tasting, and smelling. A Context for Inquiry. Effective inquiry is more than just asking questions. A complex process is involved when individuals attempt to convert information and data into useful knowledge. Useful application of inquiry learning involves several factors: a context for questions, a framework for questions, a focus for questions, and different levels of questions. While much thought and research has been spent on the role of inquiry in science education, inquiry learning can be applied to all disciplines. Individuals need many perspectives for viewing the world.