A DISTRICT’S JOURNEY TO

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Students learn best from well-designed instruction. To what extent can a school district design a curriculum that supports inquiry learning? How can a district implement consistent inquiry practices in forty schools? Newport News Public School District’s journey to inquiry began in 2004 with a district-wide curriculum audit (Phi Delta Kappa International 2004). The audit team recommended that the district develop and implement a curriculum management plan aligned to the Virginia Standards of Learning (SOL), and monitor, assess, and train staff in the literacy and mathematics curriculum. The curriculum plan would provide students with the opportunity to learn by developing a guaranteed and viable curriculum based on challenging learning goals and frequent formative feedback (Marzano 2003). The goal was to reduce the disparity of achievement in Newport News’s diverse student population (see figure 1), served in twenty-six elementary schools, nine middle schools, and five high schools.

New Focus on the Inquiry Process

The district elected to overhaul its entire curriculum, core content as well as the arts, physical education, and library media, using the Understanding by Design (UbD) framework developed by Grant Wiggins and Jay McTighe. Curriculum designers continue to write and revise for multiple courses across twelve grades.

Essentially, the UbD framework (Wiggins and McTighe 2005) begins the instructional design process with the end—what students should know and be able to do. Curriculum designers build units around Essential Questions that focus student inquiry on “uncovering” unifying themes or concepts, called Enduring Understandings. The UbD inquiry-focused, constructivist approach to learning is a natural design tool for developing library curriculum.

The 1980s library curriculum had become obsolete with the adoption of the Virginia SOL in 1995. Library media specialists were to teach the “research strand” of the English SOL. At the beginning of the UbD process, each librarian developed his or her own instructional program, based on the librarian’s own assessment of student needs and understanding of the Information Power: Guidelines for Library Media Programs (AASL and AECT 1988). There was little coordination of effort at the district level beyond collecting statistics to indicate the number of skills, literary enrichment, or technology classes taught. There was no consistency of practice across the district (2004). We lacked a common vision, had no common understanding of an inquiry process, and had no shared vocabulary to describe our work, beyond the statistical categories “skills, literary enrichment, and technology.”

The library media curriculum team identified four major goals to accomplish before we wrote our first unit: a) research, adopt, or develop a district-wide inquiry process model, b) develop a scope and sequence of skills, c) identify the Essential Understandings of our curriculum, and d) validate the skills against these core understandings.

Developing a Research Process Model

A core group of about a dozen librarians agreed to research and develop an inquiry process. The ideal model would use simple language, be appropriate for all students, and be non-linear, reflective, and recursive. The group examined existing research process models, including Eisenberg and Berkowitz’s Big6, Yucht’s FLIP it!, McKenzie’s research cycle, and others (Eisenberg and Berkowitz 1998, Yucht 1997, McKenzie 2000). None of the existing models offered all the sought-after qualities, so the team designed a
The district model, which we called the Inquiry Process. The graphic of the model (see figure 2) illustrates its recursive nature, with the steps Reflect and Revise shown in the center. The learner enters the process with existing knowledge, follows the steps Question, Plan, Collect and Credit, Organize, Synthesize, and Communicate, while reflecting, revising, and evaluating interact with each step throughout the project.

**Considering Scope and Sequence for Skills**

We struggled with the relevance of a scope and sequence for skills. Some argued that a “skills” focus would communicate the intent to teach skills in isolation. Others believed that we needed to identify specific skills to develop an orderly and manageable curriculum. Some argued that student mastery of skills depends on a variety of factors, including time to teach and practice, as well as developmental readiness. The team examined a variety of scope and sequence documents available on the Web, including a detailed document by the Fairfax County (VA) Schools, which referenced the Virginia Language Arts Standards of Learning (SOL), and a more developmentally-based document published by Bellingham (WA) Public Schools. Our final document organized skills by four big ideas or unifying principles: Inquiry Process, Locating Information, Appreciation of Literature, and Ethical Use of Information. Figure 3 provides an overview of the inquiry process behaviors, or skills, that are appropriate for grades K–5.

Design teams developed the Enduring Understandings and Essential Questions of the library media curriculum in spring 2005, and wrote units of study through the summer and into academic year 2005–2006. Collaboration at the district level communicated the importance of teaching information literacy skills in the context of classroom instruction. The curriculum units, aligned with the content-area pacing guides, could serve as one of the major performance tasks of the classroom unit.

Each unit places the students in a scenario with a real-world problem to solve and an audience to whom they must communicate their findings. The elementary curriculum consists of two extended inquiry units per grade level in grades 2–5, and one inquiry unit in kindergarten and first grade. The units include: graphic organizers to help students collect, organize, and synthesize information; student self-assessment rubrics and teacher assessment tools; and a variety of recommended resources. Although middle school and high school units were also introduced that year, we achieved the greatest consistency of implementation at the elementary level.

**Implementing the Inquiry Process**

The district launched the curriculum in August 2005 when the curriculum team introduced the curriculum framework, its design principles, and several of the units. We invited library media specialists to express their concerns in writing. Questions included:

- What happens if scores [on the research skills portion of the SOL tests] decline?
- How could we deal with time constraints, especially on a fixed schedule?
- How do we demonstrate that students are learning skills?
- How shall we collaborate with teachers who will not collaborate?

We recognized the concerns, but asked the librarians to implement the units as written, to provide feedback, and to consider this first year a trial.
No one, not even the authors, anticipated the difficulty of teaching this curriculum. Each unit required significant preparation and organization. We had to learn how to lead students through an inquiry process as we were learning it ourselves. As teacher-librarians, who had previously functioned as independent contractors within their schools, became accountable to teach a specific curriculum aligned with classroom content on a strict pacing guide, the stresses were enormous. Many found the units difficult to manage on a fixed schedule. Some found they did not have enough nonfiction resources at appropriate reading levels to support the inquiry tasks. Others perceived that we were taking away their freedom to collaborate with teachers on their unique, preferred projects. Almost all, however, reported high levels of student engagement. When parents asked about the scenarios, we knew we were doing something right for the students.

That year, we had six two-hour staff development meetings, from September through March, with elementary and secondary librarians meeting separately. In addition, we read and discussed Inquiry Learning through Librarian-Teacher Partnerships (Harada and Yoshina 2004). The elementary librarians met in small groups to work on implementation plans for the units. We collected feedback through a formal feedback process and e-mails. By mid-year the complaints and anxiety of a few librarians had taken over the monthly small group sessions. In the February meeting, we brainstormed how to make the inquiry process lessons successful. This was a watershed moment in securing support for the curriculum at the elementary level.

Reflecting on the First Year

End-of-year survey comments revealed a mixture of perspectives. Some librarians expressed dissatisfaction with “system-wide forcing” of units; “mandatory” curriculum; assessment requirements; and a curriculum written “to fit the needs of higher-order thinking students, because not all schools serve those style learners.” One librarian reflected

Figure 3. Inquiry behaviors for each grade and Inquiry Process step.
on the change in her practice: “Why is the library now a classroom instead of a place to share books?”

Others saw the curriculum as a force for positive change. Some librarians said we should continue to “push inquiry process as a powerful vehicle for learning,” to “focus on research beginning with primary grades,” and to implement “curriculum units because students really benefit from learning information literacy process skills.” Several librarians suggested that we revise the units to include suggestions for modifications to fit individual school needs, and others offered many practical suggestions.

A comparison of instructional statistics from the previous year demonstrates that there was a very small degree of actual change in reported practice (see figure 4). In 2004–2005 elementary librarians reported that 50 percent of their instruction was on literary enrichment, 43 percent was on skills, and 7 percent was on the use of technology. In 2005–2006 elementary librarians reported teaching nine hundred more lessons than the previous year, or an average of three and a half more lessons per month per librarian. There was only about a 4 percent change in the balance between literary enrichment and inquiry or skills instruction: in 2006 literary enrichment lessons dropped to 46 percent of the total, and inquiry process/skills instruction rose to 47 percent of the total. These numbers suggest that our instruction continued to balance teaching inquiry strategies with an appreciation of literature.

The key reason for introducing inquiry was to allow students to apply content knowledge to a real-world problem and to teach library skills with the metacognitive support of an inquiry process model. Apparently, these units had replaced stand-alone skills lessons or older units that may or may not have correlated with the new classroom curriculum.

**Adapting the Instructional Units**

Although the amount of change in actual practice appeared small, we believed that the level of initial dissatisfaction was derived from a perception of loss of control. Therefore, we sought feedback about the units and incorporated suggestions into the curriculum. In the second and third years of implementation we empowered librarians to make modifications in the teaching plans to suit their schedules, available resources, school-improvement initiatives, and teacher-adaptations. However, the language of the Inquiry Process was not negotiable, and we continue to require two inquiry process units per grade level in grades two through five.

In some schools, librarians changed the scenarios or problems given to the students or wrote new units to align with different classroom content. Some librarians “chunked” the curriculum units into more manageable pieces for a fixed schedule, while others divided the tasks among student groups. Some found the UbD emphasis on scenarios artificial and confusing for the students, so they simplified the tasks, possibly at the risk of making the tasks less engaging. Several added new technology components, and many identified resources that were more appropriate for their particular learners. Over the last two years the media specialists have made this curriculum their own.

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**Figure 4. Comparison of instructional practices before and after introduction of Inquiry Process.**
A survey conducted at the end of school year 2008–2009 indicates the extent to which the curriculum and the Inquiry Process have changed the day-to-day practice of individual librarians. A librarian stated:

“I collaborate with the teachers each week. . . . Then I integrate parts of their units into library lessons with as many related books as I can work in with segments of the inquiry process. Almost every library class includes materials and activities for questioning, synthesizing, communicating, and reflecting. Many others include the inquiry components of planning, collecting, and organizing” (Detweiler 2008).

In other reports librarians expressed overall confidence with the curriculum. One librarian “completed inquiry lessons in [grades] 1–5 and [felt] more confident in the lessons . . . taught” (Abi-Saab 2009, NNPSLMS 2009). Other comments suggest how librarians would like to improve the curriculum.

Librarians recommended that we:

• review and revise the library media curriculum one grade at a time;
• use new AASL standards and guidelines to revise the scope and sequence;
• review older inquiry units to make sure they focus on the inquiry process, not the content.

Looking Ahead

The journey to inquiry continues. We no longer discuss whether to teach an inquiry process, but rather we focus on how to manage it. During staff development time we are addressing how questioning, think-aloud, and reading comprehension strategies support inquiry. We routinely look for evidence that the curriculum is making a difference in student information literacy. Since we have found indications that older students do not transfer this learning to other contexts, we are beginning to examine how we ask students to reflect on their use of the Inquiry Process. Support is growing for building the Inquiry Process into upper-grade curricula. In 2008–2009 the district established instructional goals for inquiry learning, and the secondary language arts department is collaborating with librarians to design an eighth-grade inquiry unit. Finally, grade-level benchmarks in Standards for the 21st-Century Learner in Action (AASL 2009) suggest a need to revisit the scope and sequence expectations.

The curriculum design process was a catalyst for change of instructional practices in the libraries. The journey continues as we reflect on the gains we have made, the needs we observe in our students, and the fertile climate for inquiry in our district.

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Works Cited:


