Leading from the Classroom:
The Effect of Collaboration on Improving Content Area Literacy Instruction

A Problem Emerges: Students and Teachers Struggle with Informational Texts

A student sits down to do her history homework, textbook open. Twenty minutes later she closes the book, having dutifully read every word of her assignment but understanding very little. A teacher replaces reading assignments with lectures, reporting that there’s no point in assigning reading because, “students won’t do it anyway.” And students at my high school who earn passing scores on informational text reading assessments in their English classes struggle to understand basic concepts in their math, science, and history texts. These observations focused my attention on the problem of content area literacy skills. During the 2010-11 school year, I worked with a team of seven teachers in a professional learning community to study and implement content area literacy strategies in math, science, English, and social studies classrooms. I wanted to know how working together on a collaborative action research project to support our students’ reading skills would make a difference in our attitudes and teaching practices in content area literacy instruction.

Observing Teachers in Collaboration: Methods of Data Collection and Analysis

My action research study was designed to investigate how a professional learning community can affect participants’ attitudes and teaching practices as they help students develop content area literacy skills. Action research offers educators an opportunity to reflect in a structured way on their own practice with the goal of transforming their work, learning from their own and their colleagues’ experiences (Holly, Arhar, & Kasten, 2009). I used the following
questions about secondary teachers engaged in a multi-disciplinary professional learning community to study and implement content area literacy strategies:

- In what ways did their understanding of content area literacy change over time?
- To what extent did they implement new literacy strategies in their instruction?
- What supported their learning?
- What got in the way?

Setting the Stage: Forming the Content Area Literacy Task Force

My research took place at a traditional, comprehensive public high school of approximately 1700 students located north of Seattle, Washington. With the help of a $5,000 grant from the state’s Office of the Superintendent of Public Instruction (OSPI), I formed a professional learning community of seven teachers, the Content Area Literacy Task Force. Louis, Marks and Kruse (1996) define a professional learning community (PLC) as “teachers’ collective engagement in sustained efforts to improve practice” (p. 758). Five “elements of practice” are defined which must be in place to qualify a group of educators as a PLC: shared values, focus on student learning, collaboration, deprivatized practice, and reflective dialogue (p. 760). The task force met seven times for 90 minutes, from September 2010 through April 2011, and spent a day observing each other’s classrooms in May 2011. During the meetings we conducted a book study based on “50 Instructional Routines to Develop Content Literacy” by Fisher, Brozo, Frey, and Ivey (2011). We developed Content Area Reading Inventories (CARIs); selected which literacy strategies we wanted to try out; and shared the resulting student work, our successes, and our frustrations.

The task force participants, all volunteers, chose to participate because we were frustrated by our students’ inability to make sense out of their textbooks, and we looked forward to an
opportunity to collaborate with colleagues. We represented diverse disciplines and backgrounds. The following table demonstrates the breadth of knowledge that the team members were able to bring to this study (names have been changed).

Table 1: Task Force Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Content Areas</th>
<th>Teaching Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kari</td>
<td>AP World History, English, Journalism</td>
<td>23 years</td>
</tr>
<tr>
<td>Sophia</td>
<td>Honors Sophomore English, Junior English</td>
<td>7 years</td>
</tr>
<tr>
<td>Sioux</td>
<td>Sophomore English, English Language Learners, Librarian</td>
<td>39 years, 9 in ELL</td>
</tr>
<tr>
<td>Teresa</td>
<td>French, Washington State History, Government</td>
<td>1 year, 5 years substitute teaching</td>
</tr>
<tr>
<td>Rachel</td>
<td>Algebra, Geometry</td>
<td>14 years</td>
</tr>
<tr>
<td>Anne</td>
<td>Speech-Language Pathologist</td>
<td>14 years</td>
</tr>
<tr>
<td>Helen</td>
<td>Biology, Chemistry</td>
<td>9 years</td>
</tr>
</tbody>
</table>

Documenting Teachers’ Learning Process: Data Collection

Because I was interested in discovering what effects meeting in an interdisciplinary learning community would have on teacher learning about content area literacy, I collected data that might show their development over time, as well as evidence of their interactions within the group and how that might change, particularly in terms of how the task force members described the ways their students interacted with texts. I was also interested in how teachers from different academic disciplines might find similarities and differences in the ways that literacy operated in their classrooms. I took detailed notes during our monthly task force meetings, and collected emails and samples of student work. After five months, I surveyed all of the team members, using seven open-ended questions related to their changing understandings of content area literacy, strategies they were trying out, and their successes and frustrations. I then conducted
follow up interviews with three members, asking them to elaborate on their survey responses. I chose to focus on the three members of the task force who were classroom teachers and who had remained with the project until its conclusion.

**Findings: Discovering Effects of Collaboration, Supports and Obstacles to Teacher Learning**

“The language of math is symbolic and procedural. In math, literacy means turning things into symbols and expressing yourself with the symbols.” Rachel, math teacher

“Literacy is communication, not just decoding.” Sophia, English teacher

“In literacy, the final project is comprehension of what’s going on; how to go from concept introduction to concept comprehension.” Teresa, French and social studies teacher

These quotations from one of the PLC’s final meetings demonstrate new understandings about teaching literacy which were developed during the course of this action research study. In the following section I will look at each of my four research questions and explain the themes which emerged from an examination of meeting notes, artifacts, surveys, and interviews with the participants.

**Evolving Understandings: Defining, Implementing, and Integrating Content Area Literacy**

The PLC in this study developed organically from a problem identified by teachers: students were not transferring informational text literacy skills learned in English classes into their other academic disciplines. Team members pledged to focus on action – identifying ways that we could improve our instruction to help students. Therefore, one important assessment of the PLC’s effectiveness was to examine whether or not teachers implemented new teaching strategies. The first step was to create a timeline for each participant (Holly et al., 2009) recording comments gleaned from meeting notes. I was particularly interested in their ability to
match literacy strategies to specific types of texts and students’ perceived skill levels. Next I developed a grid (Hubbard & Power, 2003) on which I recorded strategies attempted, rationale for matching strategies to texts and students, and how teachers described the impact on student learning. I pulled data from meeting notes, emails, samples of student work, interviews, and surveys.

While these charts helped me look across time and content areas, they did not address my last two questions: what supports or inhibits teachers’ learning? So I created two more matrices charting these questions using information from all of my data sources, placing particular emphasis on the surveys and interviews that were specifically designed to elicit this information. I used meeting notes to confirm my findings because I was concerned that problems might be hidden or glossed over. Also, because survey and interview responses were not anonymous, I was concerned that participants might censor their answers to avoid offending me as the team facilitator (Holly et al., 2009).

Once I transferred relevant information from my data sources to the matrices, I was ready to look for overarching themes. To verify that each theme was reflected in all the available data sources I color coded my notes in the matrices. I considered a theme valid if it appeared in the timeline for at least three of the six teachers, or if it appeared in at least three out of four data sources. As a final check on my emerging research findings, I met with my team during the analysis process and held an informal discussion of my discoveries to see if they concurred. I was able to identify the following themes, relevant to my original research questions:

• Changing understandings: Teachers became more aware of the unique literacy demands within their academic disciplines.
• Implementation: Teachers increased their ability to identify student needs and develop strategies to meet those needs.

• Supports: Working collaboratively encouraged teachers to experiment with new strategies.

• Obstacles: The pressures of time and content coverage made it difficult for teachers to fully integrate literacy routines into their curriculum.

Changing Understandings: Developing Definitions of Content Area Literacy

At the start of our work together, participants had widely varied understandings of content literacy. Most began with an assumption that literacy meant the ability to read textbooks. The idea that at the secondary level literacy looks different in different content areas, based on the patterns of discourse and types of symbolic communication unique to the disciplines (Shanahan & Shanahan, 2008; Draper, 2008), was a new concept which took time, repetition, and hands-on experiences to fully grasp.

Responses to a survey question about their initial definitions of content area literacy revealed that all participants acknowledged the importance of reading across the curriculum. For example, Sophia noted that skills learned in English classes could be useful in other classes, as well. Both Teresa and Anne indicated that they had received little training to teach literacy and had developed strategies “on the job.” Helen had received training in literacy skills as part of her teaching certification program, but not content specific strategies.

Meeting notes reflected growing awareness by each participant of the unique needs of each discipline. At our first meeting I presented information about the differences between generalized reading strategies, such as addressing vocabulary and setting a purpose for reading (Gunning, 2003), and content-specific strategies. In our October meeting each team member
began to develop a CARI to assess students’ reading skills. By recognizing the need to develop different assessments for each content area, rather than relying on the generic “informational text” assessments provided by the district for HSPE preparation, the team demonstrated a shift in thinking from measuring generic literacy skills -- more appropriate for primary and intermediate levels -- to assessing the content specific skills secondary students need to succeed in their classes (Shanahan & Shanahan, 2008).

**Implementation: Identifying Student Needs and Effective Strategies**

As the teachers’ awareness of the complexity of literacy tasks increased, they began to see their students’ challenges through a different lens. Although still expressing frustration with students’ reluctance to engage in text-based activities, they became more analytical in understanding why students resisted reading. Language describing students as “bored,” “unmotivated,” or “unfocused” was replaced with realizations about why they were struggling. For example, in an exchange between Anne and Rachel about students’ difficulty locating main ideas in both U.S. history and math texts, Rachel observed, “When I skim I don’t do it the way they do it. I need to understand how *they* do it.”

Examining which strategies were actually used by each teacher and what rationale they gave for their choices gave further insight into how the study participants came to understand content specific literacy instruction. All of the participants who remained with the team for the full length of the study tried out at least three different strategies and were intentional about matching the strategies to specific content or skills. Table 2 describes how three teachers matched literacy strategies to particular student learning goals.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Strategy</th>
<th>Content/Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rachel, math</td>
<td>Think aloud</td>
<td>Use teacher-provided notes to supplement text,</td>
</tr>
</tbody>
</table>
This is just a small sample of the willingness of each teacher to experiment with new teaching methods as they learned to assess students’ literacy needs and devise ways to enhance their toolbox of reading strategies.

**Supports: The Value of Teachers Coaching Teachers**

Another indication of participants’ ability to match literacy strategies with specific content was evident in the ways they coached each other during task force meetings. Engaging in substantive dialogue focused on increasing student learning was a powerful motivator for participants’ continued commitment to the team despite their hectic schedules. Seeing results in the classroom was the payoff for their willingness to take risks as they learned new teaching methods. Rachel commented in her interview on a change she observed when she assigned students three to ten minutes of reading in her math classes, saying, “Before I heard, ‘I don’t get it.’ Now I get responses.”

Studies of effective professional development for teachers repeatedly assert that one-shot workshops do little to transform teachers’ practice, while ongoing, job-embedded, collaborative work allows teachers to develop deeper understandings and improve their instruction (Darling-Hammond & Richardson, 2009; NSDC, 2010). During the five months of this study I discovered...
ample evidence that the PLC structure is an effective form of professional development, based on the following findings from interviews, surveys, and meeting notes, because PLC members provided a collegial and collaborative atmosphere which supported teacher learning, including their ability to identify and solve instructional problems.

**The value of collegiality and collaboration.**

“Priceless. Invaluable. Amazing.”

This was how Teresa, a novice teacher, described her participation on the Content Area Literacy Task Force. “As a new teacher, I feel like I’m flying blind sometimes. This has been brilliant. It helps me feel more competent and confident in my classroom. I don’t think I could have done this without the assistance of the team.” She especially appreciated being treated as an equal by more experienced teachers. “I don’t feel like there’s a leader-follower, senior-subordinate dynamic. All acknowledge there’s something we can learn from everyone else; we’re there to improve our students’ experience, that’s our primary goal.”

The sense of shared purpose and mutual support which encouraged Teresa was a theme repeated by every member of the PLC in either their survey or their interview. Sophia felt “empowered” by the team and said that she appreciated everyone’s willingness to work together. Anne appreciated the opportunity to “talk to others and see their struggles.” The opportunity to share challenges and problem-solve together was also helpful to Rachel. She said, “I used to see myself as a ‘rogue’ teacher. [At the meetings] I saw shared experiences and the similarities of math and other areas. The shared experiences were helpful. With each meeting our comfort level increased.” Rachel’s comment highlighted the importance of putting teachers in control of their own professional development. Effective PLCs utilize the craft knowledge of teachers and allow for distributed leadership within the team.
One of the unique aspects of this PLC for our school was its interdisciplinary nature. Typically our school’s collaborative efforts had been confined to teachers who taught in the same department, usually teaching the same class (e.g., the World History team worked separately from the U.S. History team). But several team members commented that seeing how literacy operated within a variety of content areas enhanced their learning. Rachel commented in her interview that her work with teachers in more “text-based” classes, such as history and English, raised her consciousness. She said, “Hearing from other content areas, I realized it’s not just a math problem.” Sioux said in her survey, “I’ve gotten new, fresh insights into the different and profound reasons why we need to teach content reading strategies as a whole school forevermore. I reflected on this notion when the math teacher was sharing how the students didn’t grasp basic math vocabulary, and thus couldn’t comprehend the basic learning of any chapter.” Clearly, the presence of teachers from diverse disciplines enhanced all the participants’ understanding of the nuances of teaching literacy skills at the secondary level, where more advanced study requires teachers to move beyond generic “learn to read” and “read to learn” strategies. While the opportunity to give and receive encouragement and advice from colleagues with a wide variety of expertise and experience provided strong supports to the teachers’ learning, they also faced the familiar obstacle of finding time to learn and implement new teaching methods.

**Obstacles to Teachers’ Learning: The Tensions of Time**

Although participants in this study repeatedly expressed enthusiasm for the project and demonstrated growing understanding of how to implement literacy strategies to improve their students’ learning, they also expressed frustration. Considering the hectic schedules and often overwhelming curriculum pressures placed on high school teachers across disciplines, time
emerged as the primary obstacle to the teachers’ ability to use the new pedagogy they were learning at the task force meetings. Because they valued the PLC meetings, all three of the participants I interviewed lamented that we had not been able to meet more frequently. Although they struggled to squeeze one more after-school commitment into their already busy days, they wished that we had met two or three times a month instead of once.

Even more pressing was their frustration over not having enough time or energy to plan more lessons using literacy strategies. While Table 2 demonstrates that study participants were willing to “try on” a wide variety of new strategies, a closer examination of meeting notes, interviews, and surveys indicates that we had not yet taken the crucial step of fully integrating literacy into our teaching. We continued to see techniques for teaching literacy skills as an “add on” to the curriculum, somehow discrete from learning content and therefore in competition with other elements of our packed curriculum. However, to utilize literacy strategies fully teachers needed to develop routines which both teachers and students recognize as crucial to furthering students’ learning.

A strategy is something a learner does in an effort to gain meaning, solve a problem, and so on. Processes such as visualizing, determining importance, and making connections are examples of strategies. Instructional routines, on the other hand, are deliberate acts the teacher utilizes to foster those comprehension strategies. (Fisher, et al., 2011, p. 1)

The goal is not to teach students how to read, it is to teach them how to select and use appropriate strategies which will enable them to use texts as resources for understanding the key concepts within various academic disciplines. This kind of reconstruction of lessons requires significant planning time to allow teachers to analyze texts being used and carefully match an appropriate strategy to the text and the content or skill being taught.
However, despite the pressures of our curriculum and our busy schedules, all the remaining task force members expressed enthusiasm for the work and an interest in keeping our PLC together for another year. We had discovered the power of working in a collegial and collaborative interdisciplinary team.

**The Mathematics of Collaboration: The Whole Is More Powerful than the Sum of Its Parts**

Reflecting on the 18 months during which this action research project was developed and implemented, I am struck with the enthusiasm, creativity, and supportiveness of each team member. Coming from diverse disciplines, levels of experience, and teaching philosophies, we coalesced into a team that demonstrated enough trust to reveal our moments of vulnerability and disappointment as well as our successes. Our willingness to break down the walls that separate our classes and our disciplines in the traditional comprehensive high school encourages me in my belief that authentic teacher-led collaboration is one of the most effective forms of professional development for educators. Not only do teachers benefit from the climate of cooperation and risk taking that this creates, but our students also benefit as we devote our time and effort to finding ways to help them learn through challenging texts in every content area.
References


