

## Secondary Teachers' Knowledge, Beliefs, and Self-Efficacy to Teach Reading in the Content Areas: Voices Following Professional Development

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**Abstract:** This study explored 24 content area teachers' knowledge, beliefs, and self-efficacy about teaching reading in the content areas at the end of a state-wide professional development experience. The findings suggest that the participating teachers held positive beliefs, gained valuable knowledge, and were confident about teaching reading in their content areas.

Ever since the National Commission on Teaching and America's Future's (1996) report, *What Matters Most: Teaching for America's Future*, identified teachers' knowledge as the chief discriminating factor in student achievement, hiring highly qualified teachers has been a goal of schools. What makes a secondary teacher highly qualified has been expanded to include not only knowledge of their content and pedagogical content knowledge, but also knowledge about literacy and pedagogical knowledge to teach literacy within their content area (Biancarosa & Snow, 2004). While most secondary content teachers believe it is their responsibility to teach their subject area accurately and effectively, they are less inclined to take up teaching of reading in their content areas. They assume that by the time student enter secondary schools, they have mastered the skills and strategies needed for comprehending content area texts. Even when they realize that not all students are able to read the often technical, dense, and abstract texts of content areas, a lack of instructional time, reading expertise, and school support often prevents them from taking up the reading instruction responsibility (O'Brien, Steward, & Moje, 1995).

Recognizing this historical problem, the state of Florida recently developed a professional development module aimed at developing content area teachers' expertise in teaching reading in the content areas. Content Area Reading Professional Development (CAR-PD) was a 4-day institute delivered by reading experts to practicing teachers who had previously been enrolled in a state-wide professional development course in reading. The purpose of this study was to explore CAR-PD participants' knowledge, beliefs, and self-efficacy about teaching reading in the content areas at the end of the 4-day professional development experience. From a sociocultural theoretical perspective, there is a need to first explore the opinions, or voices, of the participants following professional development, before continuing to research if this type of professional development will produce changes in instruction and ultimately, changes in student achievement.

Our research questions were: (a) What are secondary teachers' beliefs or attitudes toward teaching literacy-embedded in their content areas? (b) What do they know about content area reading? and (c) What is their sense of efficacy to teach reading in their content area?

The reason we focused on knowledge, beliefs, and self-efficacy in this study is because they are often identified as key to teacher effectiveness. Snow, Griffin, and Burns (2005) have suggested a need to learn declarative knowledge (learning from books about child development, language, literacy and so on), procedural knowledge (how to teach reading in various situations),

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and conditional knowledge (when and why to use knowledge about literacy learning). Making these types of literacy knowledge usable involves having opportunities to have conversations about literacy within disciplines. The goal is to include key elements in the professional development to make them useful for planning, assessing students, and adjusting lessons for those who need it. Self-efficacy, the belief about one's capabilities to learn or perform behaviors (Bandura, 1994), is an important teacher characteristic that impacts content area teacher's ability to teach reading within their content area. Teacher efficacy, the belief or conviction that they can influence how well students learn (Guskey & Passaro, 1993), is important for middle and high school teachers as it relates to integrating literacy in the content areas (Cantrell & Hughs, 2008). Even when teachers have a sense of efficacy to teach in their content, they may have a low sense of efficacy when it comes to teaching reading to struggling or unmotivated students. Teachers' beliefs or attitudes towards content area reading have evolved over the last thirty years (Richardson, 2008). In order to teach content area reading, one must believe that it is important. A significant shift in attitude and beliefs is needed in order for knowledge to be put into practice in the classroom (Dieker & Little, 2005; Hall, 2005).

### **Methods**

Participants for the study were 24 secondary teachers randomly selected from a pool of over 100 secondary content area teachers from across the state who attended a 4-day, state-wide professional development institute with a focus on teaching reading in the content area (CAR-PD). The institute included articles on content area reading strategies, which were read and discussed along with methods for implementing them in classrooms. The participants included teachers from diverse, high-density, large southern school districts, as well as teachers from small, mono-cultural northern districts.

The 24 teacher participants were divided into two focus groups of 12 each. Each focus group was seated around a conference table with multiple recording microphones placed on the desk by a highly-trained technology expert. After being assured of anonymity and consenting to be recorded, the teachers responded to a total of seven semi-structured questions (see Appendix A) dealing with their knowledge, beliefs, and self-efficacy with time for discussion of each. A facilitator asked that the participants respond in a conversational manner without waiting to be called upon.

The interview data were transcribed and then coded using a qualitative analysis software called NVIVO 8. It enabled us to identify themes under each of the three focal domains: beliefs, knowledge and self-efficacy. These themes are presented below.

### **Findings and Discussion**

The qualitative analysis of data revealed the following themes about the participants' attitudes, knowledge, and self-efficacy to incorporate reading across the content areas. At the end of the CAR-PD experience, the teachers expressed a positive attitude toward incorporating reading into their content areas. They indicated the desire to help their students read better. As one participant noted, "I don't think I'd be here if I didn't think that reading and writing was important to our effectiveness in teaching kids to be successful on the FCAT and to them being successful in their lives in the real world." They believed that what they learned from this professional development was beneficial to their content area instruction. They were convinced that learning how to teach reading from the very beginning helped build a strong foundation that enabled them to better help their students succeed in content area classes.

The professional development experience also reinforced the teachers' beliefs in the importance of reading to all content areas. The teachers recognized the critical role reading plays

in content area success and indicated a determination to create a school culture that embraces reading across the curriculum content areas. They noted that “reading is the thread that gets the different content areas together.” In the words of another teacher, “The whole idea is that you’re stressing reading in all of your content areas. Reading is truly across the curriculum and it’s an important part of every single classroom.” This sentiment was echoed by a social studies teacher who said, “What I am taking away from this is that (reading) comes first. And even though I’m a social Studies teacher, my (students’) reading and writing skills come first. Those are the things I’m going to push through my content area.”

At the same time, however, the teachers recognized that they needed administrative and peer support in making reading a center piece of the school curriculum. As one teacher noted, “It has to be a bottom up initiative with top down support, in other words, the principal. It has to be grassroots.” They underscored the importance of principal involvement, noting that, “If principals don’t buy into it, it’s just not going to work.” They also hoped for more financial support at the state level, saying that additional resources were needed for them to successfully implement what they had learned at CAR-PD. One teacher indicated that “Money is a strong component. We’re willing to do this, but we can’t be expected to really do it out of pocket.”

### **Knowledge**

Through the CAR-PD experience, the teachers gained a more in-depth understanding of literacy and a great number of new ideas for infusion into their content areas. The following sample quotes show in the teachers’ own words their deepening knowledge of literacy and their understanding of some of the concepts and strategies to integrate in their content area classrooms:

I always saw a portfolio as an elementary thing, or a middle school thing. I teach chemistry. I think that if I have them create a portfolio throughout the year, I think I’ll get more involvement from them, and I think I’ll get more motivation out of them.

It’s writing in that journal and reflecting. I really just kind of winged it before, so now I actually have a little bit of a framework that I can use to have them keep a journal in my science class.

Two things that I learned: One thing is with the picture books. I kinda thought at first they were a little juvenile. But using them and looking at them this week, and I am like, “Oh, I can really see what’s going on.” After I teach the content. They can draw, you know, now they can see it happen.

Coming here has given the OK to use a lot of supplemental texts, and even technology. I mean, it’s just opened up a whole other avenue that you can teach your content through, rather than just using the textbook and box of supplements that the publishers give you when you buy the book.

I think the one thing I am going to take out of this is creating a more print rich environment in my classroom. As a math teacher to help them not only learn my vocabulary for the math, but to help them learn the words with prefixes and suffixes to help them learn the roots of the words.... so they can learn more for their intensive

reading classes or during those classes. The print rich environment is just something that really hit hard with me.

### **Self-Efficacy**

Equally importantly, the teachers became more confident in their ability to implement what they had learned from the CAR-PD in their classroom. According to one teacher, “I feel that I’ve learned a lot of things that I can do. I feel I am going to teach my subject through reading, instead of the other way around.” They wanted to make it clear to their students at the beginning of the school year that “we will be reading and writing and thinking every day.”

One teacher expressed her determination this way,

I’m going to do now what I’ve avoided doing in the past because I didn’t want to turn kids off. I am going to name the strategies and teach them the strategies as strategies, instead of just kind of tricking them into doing things and teaching them a strategy and a tool they can then take and apply to other things.

Some teachers even came up with concrete plans to implement what they had learned at CAR-PD. As this one teacher said, “I’m going back and going to people in my department and make some suggestions for the administrators as far as our reading, helping our reading coach get more information out so that people will improve and get this information.”

Another teacher indicated,

The issue is motivating them... You have to model to your students, if you’re not reading, your kids aren’t. So I am going to put up on my door when you come to my classroom this next year, you will see the novels that I am reading at any given time.

### **Summary and Conclusion**

The findings from our analysis indicate that the CAR-PD participants held positive attitudes towards teaching reading in their content areas at the end of the professional development. They expressed willingness to address students’ needs and saw the additional focus on reading as something that would help students gain knowledge in the content areas. Some even expressed a willingness to consider the reading goals above the content area curriculum goals. Another positive finding from our study is that the participating teachers reported that they gained valuable knowledge about the reading process and learned activities and strategies to implement in their instruction. Despite the challenges involved in teaching reading, the teachers expressed confidence in being able to implement what they had learned and had specific ideas for teaching reading in their content areas.

These findings suggest that the participating teachers had positive experiences with the professional development institute. The boost in their knowledge, beliefs and self-efficacy about reading will go a long way toward helping them use reading to support content area instruction. It remains to be seen, however, how the teachers translate what they have learned from their professional development experiences into classroom practices in the current high stakes testing environment. A follow-up study is needed to document the factors and issues that facilitate or hinder these teachers’ implementation of reading practices in content area classrooms.

The significance of this study is that it gives evidence that engagement in content area reading professional development contributes to the knowledge, beliefs, and self-efficacy of content area teachers to teach reading. In the future, it would be good to follow teachers in their classrooms to document the degree of implementation and the impact on their students’ achievement.

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## Appendix A

### Questions for Focus Groups

1. Why are you here and what did you hope to accomplish?
2. Do you feel that you learned anything that was new to you?
3. What do you plan to implement?
4. What type of support do you think you will need?
5. Was there anything that you would like to have training in?
6. How important do you believe this knowledge is for teaching in your content area?
7. How can you use literacy to support learning in your own content area?