The Cupola
Scholarship at Gettysburg College

Education Faculty Publications Education

6-6-2017

Brother, Can You Paradigm? Toward a Theory of Pedagogical Content Knowledge in Social Studies

Dave Powell
Gettysburg College

Follow this and additional works at: https://cupola.gettysburg.edu/edfac

Part of the Curriculum and Instruction Commons, Elementary Education Commons, and the Secondary Education Commons

Share feedback about the accessibility of this item.

Powell, Dave. "Brother, Can You Paradigm? Toward a Theory of Pedagogical Content Knowledge in Social Studies." Journal of Teacher Education (June 6, 2017).

This is the author's version of the work. This publication appears in Gettysburg College's institutional repository by permission of the copyright owner for personal use, not for redistribution. Cupola permanent link: https://cupola.gettysburg.edu/edfac/50

This open access article is brought to you by The Cupola: Scholarship at Gettysburg College. It has been accepted for inclusion by an authorized administrator of The Cupola. For more information, please contact cupola@gettysburg.edu.

Brother, Can You Paradigm? Toward a Theory of Pedagogical Content Knowledge in Social Studies

Abstract
Although research on pedagogical content knowledge (PCK) has accelerated in recent years, social studies educators have not generally been part of the conversation. This article explores why a theory of PCK for social studies has been so difficult to elaborate, focusing on the field's inability to come to consensus on its aims and purposes and on a pervasive distrust of traditional academic disciplines and scholarship they produce. These factors have helped make the effective preparation of social studies teachers, something researchers studying PCK hope to improve, exceptionally difficult. This article proposes that if the field can resolve its relationship to the disciplines, a more coherent conceptualization of teacher education in social studies could come into focus. Such a reconceptualization could help position social studies teacher educators to contribute to the knowledge base on PCK, particularly with regard to the transformation of disciplinary content into school curriculum.

Keywords
teacher education preparation, social studies teacher education, social studies education, preservice teacher education

Disciplines
Curriculum and Instruction | Education | Elementary Education | Secondary Education

This article is available at The Cupola: Scholarship at Gettysburg College: https://cupola.gettysburg.edu/edfac/50

Brother Can You Paradigm?
Toward a Theory of Pedagogical Content Knowledge in Social Studies

Dave Powell
Gettysburg College

ABSTRACT
Although research on pedagogical content knowledge (PCK) has accelerated in recent years, social studies educators have not generally been part of the conversation. This article explores why a theory of PCK for social studies has been so difficult to elaborate, focusing on the field's inability to come to consensus on its aims and purposes and on a pervasive distrust of traditional academic disciplines and scholarship they produce. These factors have helped make the effective preparation of social studies teachers, something researchers studying PCK hope to improve, exceptionally difficult. This article proposes that if the field can resolve its relationship to the disciplines, a more coherent conceptualization of teacher education in social studies could come into focus. Such a reconceptualization could help position social studies teacher educators to contribute to the knowledge base on PCK, particularly with regard to the transformation of disciplinary content into school curriculum.

Published in *Journal of Teacher Education* (2017), DOI: 10.1177/0022487117708553

In 2005 Lee Shulman, then president of the Carnegie Foundation for the Advancement of Teaching, wrote a blistering critique of the state of teacher education for *The Stanford Educator,* the alumni magazine of his former employer. With uncharacteristic bluntness, Shulman laid the issue bare: “Teacher education,” he wrote, “does not exist in the United States” (p. 7). In fact, Shulman continued, “there is so much variation among all programs in visions of good teaching, standards for admission, rigor of subject matter preparation, what is taught and learned, character of supervised clinical experiences, and quality of evaluation that compared to any other academic profession, the sense of chaos is inescapable” (p. 7). He added that it should not surprise teacher educators when critics of teacher education respond to “the apparent cacophony of pathways” into teaching “and conclude that it doesn’t matter how teachers are prepared” (p. 7). Indeed, he wrote, teacher education would only survive “as a serious form of university-based professional education” if it ceased to “celebrate its idiosyncratic ‘let a thousand flowers bloom’ approach to professional preparation” and charted a course toward substantive revision of the way teacher education is conceptualized in university settings. “Commitment to social justice is not enough,” he concluded; “love is not enough” (p. 7).

Shulman’s frustration was understandable. Almost twenty years had passed since he had helped launch a vigorous research program designed to professionalize teaching by introducing the concept of pedagogical content knowledge (PCK) to researchers and practitioners and yet little, to his eye, seemed to have changed. If anything, teacher education has only become more fragmented in the years since Shulman vented these frustrations. Now, more than ever, alternative pathways into teaching flourish and even university-based programs experiment with different approaches to teacher preparation, sometimes with little evidence of whether they will be successful or not. As the pressure to evaluate and assess what teacher candidates learn

continues to increase it seems more likely, not less, that programs will continue to make changes without fully evaluating the potential of their effectiveness first. This, in turn, may lead researchers to continue to separate classroom teaching from teacher education in their work. As Grossman & McDonald (2008) point out, research on teaching and research on teacher education—two distinct but closely related fields, each one building off the other—already continues to proliferate with the two rarely intersecting.

But even if PCK has not delivered a shared sense of clarity and purpose to teacher education that crosses content-area boundaries, Shulman's program has achieved something of considerable importance—and teacher educators should heed its implications. Central to the idea of PCK is the notion that "deep knowledge" of content is crucial to effective teaching and cannot be taken for granted. In spite of this breakthrough many teacher candidates continue to take courses that separate content knowledge from the development of their pedagogical practice, leaving them ill prepared to conceptualize subject matter effectively. The dichotomization of content and pedagogy, perhaps as prevalent in social studies education as in any field, contributes to the sense that a "great divide" separates teacher educators from their colleagues in the disciplines—a lamentable situation that makes it unnecessarily difficult to give new teachers the training they need and deserve (Bain & Mirel, 2006; Labaree, 2004; McDiarmid & Vinten-Johansen, 2000).

Such compartmentalization is troubling for a number of reasons. The separation of content from pedagogical training in teacher preparation programs leaves many prospective teachers lacking adequate and flexible content knowledge *for teaching*, a separation that often renders the content prospective teachers do learn inert and disconnected from both the school curriculum and from the methods of instruction most likely to connect knowledge to students.

The problem is especially acute for teacher candidates in social studies. Since social studies is by its very nature an interdisciplinary subject, aspiring social studies teachers often struggle to see the connection between what they learn in their college classes and the ever-expanding fact based curricula they are expected to teach in their classrooms. As Seixas (2001) has written, "not being a 'subject studied in college,' social studies [is] not the starting point for student teachers in the way that the study of literature or history" might be (p. 546). Put another way, what future social studies teachers learn in college, from a subject matter standpoint, is quite different from what they will eventually be asked to teach. And when the chips are down, inexperienced teachers tend to revert to what they know (typically, what they have seen in their own classes as students themselves) over the teaching practice they idealize (Lortie, 1975), or tend to rely on textbooks to guide their practice—often with poor results (Loewen, 2007; 2009).

A growing literature base supports the idea that the cultivation of content knowledge, and subject matter content itself, should receive more attention in teacher preparation programs. Much of this work has centered on the concept of pedagogical content knowledge. In traditional subjects such as mathematics (e.g., Ball, 1993; Ball, Thames, & Phelps, 2008; Carpenter, Fennema, & Franke, 1996; Carpenter, Fennema, Peterson, & Carey, 1988; Even & Tirosh, 1995; Hill, Ball, & Schilling, 2008; Krauss, et. al., 2008; Lehrer & Franke, 1992; Marks, 1990; Peterson, Fennema, Carpenter, & Loef, 1989), science (e.g., Clermont, 1994; Geddis, 1993; Gess-Newsome & Lederman, 2002; Sadler, et. al., 2013), and English/language arts (e.g., Grossman, 1989; Gudmundsdottir, 1991; Howey & Grossman, 1989), at levels that span the K-12 curriculum, and also in less traditional subjects like physical education (Chen, 2002; Siedentop, 2002) and even school leadership (Stein & Nelson, 2003), PCK has been used as a framework for defining professional teaching knowledge. It also figured prominently in a recent

study (Kleickmann, et. al., 2013) exploring how structural differences in teacher preparation programs affect PCK development.

This is fertile ground and, yet, little of it has been plowed where social studies is concerned. A few researchers (e.g., Gudmundsdottir & Shulman, 1987; Segall, 2004; Ormrod & Cole, 1996; Whitson, 2004) have attempted to explicitly link social studies and pedagogical content knowledge, but none have adequately explored the complex relationship between social studies as an interdisciplinary school subject and the concept of PCK. VanSledright (2010, 2013) has explored the relationship between historical thinking and teaching practice promises to expand the conversation about teacher knowledge in ways that are consistent with the concept of PCK, while Monte-Sano (2011) and Monte-Sano & Budino (2013) have even addressed PCK development for history teaching explicitly, but this work still does not address the fundamental question of what pedagogical content knowledge in *social studies* might look like.

Why has social studies, as a field, been so resistant to the PCK framework? I want to suggest two possible explanations. First, important questions about the goals and purposes of social studies have never been resolved, dating back to the development of social studies as a school subject (Evans, 2004; Saxe, 1991). While many social studies educators point to the field's lack of consensus on aims and purposes as a sign if its strength, it could just as easily be argued that when educators have not reached agreement on the central purposes of their work the resulting incoherence makes it very difficult to prepare new members of a professional community and initiate them into it. General agreement on purposes and goals is imperative in education, so resolving some of these issues is crucial to moving the field forward. Until social studies educators take the time to define more clearly what education for citizenship looks like,

and until a stronger consensus is reached on the key goals and aspirations of social studies education, efforts to strengthen teacher education in the field seem destined to come up short.

But there is a second reason PCK has never been a good fit for social studies, and it is related to the first: it's clear that social studies has what Shulman (1986) called a "missing paradigm problem." In his initial articulation of what PCK is, Shulman argued that research on teaching and teacher education was marred by a blind spot with relation to content—researchers, in other words, had failed to recognize that pedagogical techniques do not exist in a vacuum. They need to be paired appropriately with subject matter knowledge (and considered in light of other contextual information, such as the curriculum itself and the nature of the students being taught) in order to actually bring about effective student learning. His solution to this problem was to reconceptualize the foundations of teacher knowledge to incorporate knowledge of subject matter and describe its relationship to the pedagogical techniques employed by teachers. This, in a nutshell, is what "pedagogical content knowledge" is.

Crucially, Shulman argued that converting subject matter knowledge into knowledge for teaching depends on developing a deep understanding of the disciplinary structures that helped create that knowledge in the first place. This has proven to be an especially tricky problem for social studies researchers interested in PCK to handle—mainly because identifying the structures of a subject that has never been adequately defined inevitably seems like a fool's errand, but also, too, because some social studies educators harbor a longstanding distrust of knowledge generated in the disciplines that prevents them from even beginning to conceptualize knowledge in the way Shulman described. This implies that defining the structures of knowledge in social studies is a key to developing a working framework for PCK in the field. Doing so may also, in turn, contribute something to the ongoing debate over goals and purposes that has long dogged

social studies as a field. In a sense, then, addressing the missing paradigm problem may help resolve some of the tensions that have helped lead to the marginalization of social studies in the school curriculum by providing a renewed rationale for its place in schools.

Social studies and the missing paradigm problem

As Ball (2000) has written, very few of the tasks associated with good teaching are possible without substantial and useful content knowledge. “Herein lies a fundamental difficulty in learning to teach,” she writes, “for despite its centrality, usable content knowledge is not something teacher education, in the main, provides effectively” (p. 243). Bain and Mirel (2006) extend the point, arguing that “educational leaders, since the time of Horace Mann, routinely have treated content knowledge and methods as separate albeit related areas of study, research, and teacher preparation,” thus effectively preventing teachers from seeing the dependency of each on the other (p. 212).

At its best, say Bain and Mirel (2006), this approach can be viewed as an “additive model,” through which “preservice teachers would enter professional education programs with a reasonable amount of subject matter knowledge and then gain expertise in how to teach that knowledge to their students” (p. 212). At its worst, however, “the dichotomy of subject matter and methods [has] led to a compartmentalized model in which experts on both sides of the divide paid little attention to one another” (pp. 212-13). Likewise, Thornton (2001) has pointed out that teachers often see traditional approaches to teacher education as “too divorced from the realities of classroom teaching” even as those approaches are condemned by subject matter specialists who view them as “process at the expense of content” (p. 76). Thornton concedes that “both charges have validity unless method is directly tied to the materials of instruction” (p. 76).

In his initial description of the concept of PCK, Shulman (1986) wrote that "the absence of focus on subject matter among the various research paradigms for the study of teaching" amounted to a "'missing paradigm' problem" (p. 6). He described the missing paradigm in teacher education as "a blind spot with respect to content" brought about by excessive focus on technical orientations toward teaching and teacher knowledge (p. 7). While discussion of content of course figures heavily in some research on social studies teaching, very little of that research actually applies to the questions at the core of Shulman's research program, questions that can only be addressed by looking carefully at what social studies teachers actually teach in the classroom—and how they were prepared to teach it. As Shulman (1986) put it,

> What we miss are questions about the *content* of the lessons taught, the questions asked, and the explanations offered. From the perspective of teacher development and teacher education, a host of questions arise. Where do teacher explanations come from? How do teachers decide what to teach, how to represent it, how to question students about it and how to deal with problems of misunderstanding? (p. 7; emphasis in original)

Shulman and his colleagues were most concerned with finding out what enabled the "successful college student" to "transform his or her expertise in the subject matter into a form that high school students [could] comprehend" (Shulman, 1986, p. 8). Seixas (2001) adds that Shulman was also "concerned with how student teachers learned to teach in high schools what they had studied in college," which has, of course, proven to be a particularly thorny problem for researchers interested in how PCK would look in social studies (p. 546).

And Shulman's program was also focused, as Deng (2007) ably points out, on two related assumptions. The first assumption, according to Deng, is that "the academic discipline is the primary source of what is taught and learned in school" (p. 282). This assumption reinforces the

importance of helping teachers understand the "structures" of disciplines as part of their preparation for teaching, something Shulman drew from his work with Schwab (1964, 1978), and which Schwab partially derived, in turn, from the work of Bruner (1960). The second assumption, Deng writes, is that "a teacher necessarily *transforms* his or her [knowledge] of the subject matter of the academic discipline into the subject matter of the school subject," and that this is "construed as an essential pedagogical task undertaken by an individual classroom teacher" (p. 282).

Herein lies one of the major shortcomings of Shulman's explication of PCK, according to Deng: it fails to account for the mediation of disciplinary content *before* it reaches teachers—that is, as it is modified and reformulated for inclusion in the school curriculum. This is a crucial point for social studies teachers, and one that renders the application of PCK as a framework for teacher knowledge exceptionally problematic in social studies. Whereas in, say, mathematics, the work of scholars in the discipline may go through a similar mediation process as it passes through the hands of curriculum designers on the way to teachers and into the classroom, it still begins as math and ends its journey, on the other end, as math as well, largely untouched by political and ideological pressure. But something else happens in social studies. For elementary teachers, for example, history may find its roots in the work of disciplinary scholars but then it must pass through the political, ideological, and intellectual gauntlet of curriculum development before it becomes available to them. Only then does it become something called "social studies." The individual teacher, as Deng notes, is held responsible for making sense of this transformation, and is dependent on his or her own understanding of the structure of history as a discipline (or whatever discipline the content came from) in order to make the transformation meaningful. If the teacher is not equipped to do that it's unlikely that it will be done well.

Even for secondary teachers, the transformation of content is problematic. A teacher may, for example, have mastered the structure of history as a discipline but be asked to teach psychology instead. Thus not only is the teacher asked to somehow understand how the scholarship produced by psychologists has been transformed as it becomes embodied in the curriculum, but she may have to do so without a firm sense of how knowledge generated in the discipline of psychology is organized, how it is generally interpreted by scholars, or how it connects to other knowledge. As a result, many teachers rely on textbooks or other curriculum materials handed to them to organize knowledge for them and guide their instructional practice—an approach with significant shortcomings.

Science may be the school subject most like social studies in the sense that it actually encompasses many subject areas. Unlike social studies teachers, however, science teachers are more likely to earn certification in a single subject area (usually biology, chemistry, or physics) and these subjects are largely united methodologically and epistemologically; the same cannot be said of the various disciplines that form the foundation of social studies. How, exactly, are social studies teachers supposed to conceptualize content when tracing it back to its source is so difficult? Again, it should come as little surprise that so many rely on textbooks to teach and accept the knowledge contained in the textbooks they use as indisputable; not spending time trying to chase down the provenance of content means having less to worry about as yet another school day looms on the horizon.

So what does PCK look like, and how would the application of these ideas be helpful to social studies teachers? Again, Shulman (1986) argued that the ability to "think properly about content knowledge requires going beyond knowledge of the facts or concepts of a domain" to "understanding the structures of the subject matter in the manner defined by such scholars as

Joseph Schwab" (p. 9). Schwab maintained that the "structures of a subject" (here meaning an academic discipline) include both substantive and syntactic components (Schwab, 1978). Substantive structures, according to Shulman, include the "variety of ways in which the basic concepts and principles of [a] discipline are organized to incorporate its facts." The syntactic structure of a discipline, on the other hand, "is the set of ways in which truth or falsehood, validity or invalidity, are established" (Shulman, p. 9). In other words, to develop PCK teachers need not only to "know" a subject in the traditional sense (i.e., as a pile of information collected over time), but they also need to know how and why it has been organized the way it has been organized by disciplinary scholars. What are the methods scholars use to organize knowledge? How do they decide what is true and what isn't? How are disputes about truth and validity resolved in the discipline?

Furthermore, academic disciplines provide an organizational structure that helps outsiders and insiders alike not just define what something is, but also what makes it good. To use a common metaphor, if we considered jazz music a discipline, its "structures" would permit connoisseurs and laypeople alike to say if a particular piece of music should be classified as "jazz" or if it should be categorized as another kind of music. These structures would also help explain *why* a certain piece of music is considered jazz, and would provide a framework for identifying what constitutes "great" jazz as opposed to the run-of-the-mill variety.

Of course such judgments would almost always be open to disagreement, but those with the expertise to make these judgments may also share much in agreement. They may agree, for example, on what has constituted seminal work in the field, on recognized pioneers, and they may agree, to some extent, on a "canon," and on ideas about who is pushing the boundaries of jazz and what makes it possible for them to do so. Moreover, aficionados also develop a common

language useful for both talking about their commonalities and for initiating new "members" into the field who can then push the group in new directions. The culture that forms around the subject is created almost naturally. Wherever fans of jazz meet and talk about the music they love, and certainly wherever jazz musicians with extensive knowledge of the work their own work builds upon share their insights with one another, the blunt characteristics of a "discipline" exist.

In much the same way, it becomes important for teachers to understand the nature of knowing within the disciplines they teach as well as how conflicts are resolved within those disciplines when competing claims of knowledge are made. It is not enough for teachers simply to internalize or memorize knowledge; they must also know where that knowledge came from, how it has been organized, and, perhaps most importantly, what prevents alternative conceptualizations of it from emerging. This, in turn, requires extensive understanding of the particular intellectual arrangements made in academia under the aegis of the disciplines—at least as long as disciplinary structures provide the template for the school subjects teachers will teach. It also builds upon Gardner's (1991) assertion that "the understandings of the disciplines represent the most important cognitive achievements of human beings," and that "it is necessary to come to know these understandings if we are to be fully human, to live in our time, to be able to understand it to the best of our abilities, to build upon it" (p. 11).

A lack of discipline in social studies

The definition of pedagogical content knowledge just provided raises a number of salient questions for teacher educators, especially for educators of social studies teachers. Setting aside the transformation problem momentarily, it is clear that Shulman's emphasis on subject matter

content as being inextricably tied to traditional academic disciplines is problematic for social studies educators. Following his lead, scholars investigating PCK in other fields have largely accepted the role of the disciplines in shaping school content but no such embrace of the disciplines seems imminent in social studies. As Seixas (2001) has noted wryly, "the ambivalent relationship of social studies to its component academic disciplines poses a problem for this research program" (p. 546).

Seixas' description of the relationship between social studies researchers and the disciplines as "ambivalent" puts it mildly. Social studies researchers and teacher educators have long distrusted the motives of disciplinary scholars, and historians have been viewed with particular suspicion. Barton and Levstik (2004), for example, articulated the profound distrust of the disciplines that has often emerged in the work of social studies researchers when they wrote:

> The goal of teaching in ways consistent with academic disciplines is an inadequate and unconvincing rationale for history, or, we suspect, for any other subject. Far from constituting the crowning achievements of civilization that some scholars like to claim, academic disciplines are simply institutionalized outgrowths of the professional specialization that took place during the late 19th century. Moreover, their methods and objects of study are profoundly shaped by the limited and particularistic viewpoints of those involved in creating and perpetuating them. As a rationale for teaching, the focus on disciplinary history seems unlikely to inspire the intellectual and emotional commitment necessary to reform practice. (p. 259)

Barton and Levstik provide several references to support this point (see p. 265), and their words echo those of Nelson (2001), who argues that "what we usually call 'disciplines' is the result of historical accident in higher education and the politics of special interest groups and advocates

rather than the result of intellectual examination or knowledge-based determinations and definitions that are empirically verifiable" (pp. 24-25). Nelson even goes so far as to suggest that history itself should not even be considered a discipline. He calls efforts to characterize it as such nothing more or less than "academic imperialism" (p. 25).

Some of this wariness may find its roots in the failed "New Social Studies" movement of the 1960s and 1970s (for a rumination on the subject see Beyer, 1994), but much of it seems to exist in the deep-seated conviction among many social studies researchers and teacher educators that supporters of the disciplines represent a "neo-nativist network" bent on denying students access to "real" social studies instruction (Cornbleth & Waugh, 1995; also quoted in Wilson, 2001, p. 528-29). In the suspicious words of Nelson (2001), "one of the arguments made about the defining of social studies is that it is not a discipline, and that argument is used as a means for defining the field out of existence or marginalizing it in academic discussion," with the goal ostensibly to make the traditional disciplines more prominent (p. 22). In Nelson's view, the refusal of some to define social studies as a discipline represents a shorthand way of dismissing the value of social studies altogether.

Resistance to disciplinary connections is not entirely ideological or philosophical, however. Thornton and Barton (2010) have written about what they perceive to be the "drawbacks and blind spots of a 'disciplinary' curriculum," focusing on what they see as the inappropriate interloping of historians in social studies education. More specifically, Thornton and Barton argue that focusing on disciplinary history unnecessarily narrows the scope of the social studies curriculum. "Regardless of the format of the curriculum," they argue, "someone other than single-subject specialists must be minding the store" (Thornton & Barton, 2010, p. 2487). They continue:

> Someone has to have a perspective on students' learning that transcends particular historical content in order to ensure that they learn the concepts they need. It won't do any good to include the American Revolution in the curriculum if no one is making sure there's a place to explicitly teach the meaning of taxation and representation. Historians take such concepts for granted, but social studies educators place them at the fore as they consider how to help students understand society in a complete and comprehensive way. (p. 2487)

Of course, it won't do much good to "make sure there's a place to explicitly teach the meaning of taxation and representation" in the curriculum, either, if these concepts are discussed in a way that removes them from their historical context, especially since history (or at least their perception of it) weighs heavily in the minds of many of our fellow citizens.

Thornton and Barton also express concerns that "much of the recent impetus for emphasizing history as a separate subject—as well as for denigrating the value of social studies—has come from authors and organizations that are explicitly aligned with a conservative political agenda" (p. 2488), citing Lynn Cheney, William Bennett, and Chester Finn to support their point. But these are not historians; they are educational gadflies and politicians who have inserted themselves into the space that might more profitably be held by like-minded historians and social studies educators. In fact, major changes in the orientation of disciplinary scholars toward their work should encourage social educators suspicious of their motives to reevaluate the relationship between social studies and its parent disciplines.

And what is the nature of those changes? Over the past several decades the social sciences—and history, in particular, which straddles the line between the humanities and social sciences—have undergone a profound evolutionary transformation. Seixas (2001) argues that

"broad shifts in the focus of academic history and the social sciences have rendered problematic the status of knowledge across the disciplines," noting that these changes "have reached a pervasiveness…that is dramatic if not revolutionary" (p. 547). One implication is that "the relationship between the knower and the known has come under scrutiny in an intensified way," and Seixas adds that "upheaval in the academic disciplines is widespread and multifaceted" before concluding that "epistemology is a growth industry across the social sciences" (p. 547).

In short, the epistemological ground beneath the disciplines has gradually been shifting as historians and social scientists have re-evaluated the way truth is defined in their disciplines. Historians in particular have gradually moved away from the "myth of objectivity" and toward a more interpretive view of the nature of historical phenomena (Novick, 1988). This movement emphasizes the contributions of and roles played by previously unheralded historical figures and focuses on topics unexamined by earlier generations of historians (Bentley, 1999; Foner, 2002; Himmelfarb, 1989, 1994; Zinn, 2005), calling into question the claims of social studies researchers that disciplinary historians are responsible for the invasion of conservative ideology in the school curriculum. In fact, it was a dedicated group of professional historians that led the movement for voluntary national standards in history—a movement ultimately doomed by conservative politicians fixated on such things as whether George Washington's name appeared in the standards as frequently as Bart Simpson's did (Nash, Crabtree & Dunn, 1997; Wineburg, 2001).

Concluding their analysis of the shortcomings of disciplinary history as a foundation for teaching in schools, Thornton and Barton write that the biggest mistake historians make is to paint social studies educators in such broad strokes as to make them seem monolithic. "Contrary

to the claims of many history proponents," they write, "social studies educators are not, and never have been, a unified group" (p. 2489). They continue:

> The field has long been characterized by debates over what constitutes good citizenship, over the most meaningful content for young people, over the best way of organizing that content, and over the proper balance between unity and diversity…Some social studies educators want to promote political activism, whereas others hope to nurture collaboration; some advocate more history in the curriculum, whereas others argue for less; some aim at content tied to the here and now, whereas others suggest expanding students' understanding of the range of humanity; some emphasize pluralism, whereas others want to nurture consensus. (p. 2489)

It is taken as an article of faith that this lack of consensus is not only good for the field, but a primary source of its strength. While that is debatable, it is undoubtedly ironic that Thornton and Barton complain about historians portraying social studies educators as a monolithic group even as they do the same to historians. It is also not difficult to see how social studies might seem just a bit incoherent to teachers attempting to navigate their first few years in the classroom with unresolved philosophical and epistemological questions swirling around them.

Nevertheless, the arguments posed by Thornton and Barton reflect those made by others in the social studies research community for many years, and they point to a key cause of the missing paradigm problem that plagues social studies. It seems unlikely that many social studies educators would argue with Thornton and Barton's description of their field and yet their description is one that mentions content only in passing, in terms of how it should be organized and how much of it should come from history as opposed to other subject areas. Nowhere do they attempt to identify what content should be taught, let alone what *is* taught in social studies

classrooms. While focusing too narrowly on what should be taught obscures the question of why a subject ought to be learned in the first place, teachers still need guidance as they make the transition from student to teacher—and understanding how to frame what they know for the students they will eventually teach is crucial. Ignoring this important issue and leaving it to teachers to resolve individually is a profound abdication of responsibility on the part of teacher educators, and one that should be addressed substantively and forcefully.

Moreover, none of these questions mean much in the absence of a framework for conceptualizing content in the first place. What, how, and why questions related to teaching subject matter are unlikely to be answered with any consistency by teachers unless they are able to connect them to some larger organizational structure. As Wilson and Wineburg (1988) concluded in one of the few studies that attempted to extend Shulman's work around PCK to social studies teaching, "no one who prepares to be a social studies teacher can know all of the subjects he or she may be called on to teach" (p. 149). This means that many social studies teachers will end up like the four featured in Wilson and Wineburg's research, each of whom "had as much to learn about content as about the teaching of it," regardless of their disciplinary preparation (p. 149).

Returning to Shulman's conceptualization of pedagogical content knowledge, it seems clear that a key component of the development of PCK is firm and grounded understanding of the "substantive" and "syntactic" structures of the discipline from whence the school curriculum was forged (Shulman, 1986, p. 9); an added component, according to Deng (2007) involves appreciating and understand the political and cultural factors that are involved in the translation of disciplinary content into the form it takes in the school curriculum. In either case knowledge of the discipline is essential, but social studies educators continue to think of their subject in a

loosely defined interdisciplinary way without specifying exactly how the epistemological and methodological differences that mark the various disciplines comprising social studies might be resolved. Moreover, social studies educators continue to be distrustful of their colleagues in the traditional academic disciplines. Until those suspicions are alleviated, and unless the field begins to address the lack of consensus that has defined it for so long, the notion of applying PCK as a framework in social studies seems unlikely to take root.

Yet the stakes could not be higher. As Westheimer and Kahne (2004) have noted, "the growing number of educational programs that seek to further democracy by nurturing 'good' citizens embody a…broad variety of goals and practices" (p. 241). These definitions do not exist in a political vacuum. Not to put too fine a point on it, but Westheimer and Kahne continued: "The narrow and often ideologically conservative conception of citizenship embedded in many current efforts at teaching for democracy reflects neither arbitrary choices nor pedagogical limitations but rather political choices with political consequences" (p. 241). Without a clear view of what social studies teaching is supposed to accomplish, the gaps are being filled in by people with agendas that may actually undermine what many, if not most, social studies educators value. In short, the field's failure to assert its core principles, define what makes for effective teaching, and rally around a consensus view of itself has opened the door to a host of unwelcome visitors, and their presence threatens the health and welfare not only of social studies as a school subject but of the entire concept of citizenship education more generally.

Toward a theory of PCK in social studies: What teacher educators can do

In a review of the research on social studies teaching, Levstik (2008) reported that "little appears to have changed in social studies classrooms" since a 1992 review by the Council of Chief State

Social Studies Supervisors revealed the fissures of a fractured field. "Patterns of instruction persist, with textbooks still predominating," Levstik said (p. 59). Although she noted that some teachers draw on other resources, Levstik also observed, "upon closer inspection," that "fault lines begin to appear":

> Restructuring and high stakes testing take a toll on social studies, especially among more inexperienced teachers who may be afraid to expand beyond test guidelines and textbook narratives, or who struggle to manage in newly integrated courses. At the elementary level, social studies appears to be in even more trouble. Few elementary teachers perceive themselves as experts in regard to social studies. Moreover, as high stakes assessment focuses on reading and mathematics, social studies too often disappears entirely, almost disappears as it is integrated into reading programs, or survives at such a low level students are as likely to misunderstand as understand it. (p. 59)

The moribund state of social studies education described by Levstik is often attributed to the impact of standardized testing (Au, 2009; Grant, 2007; 2009), but it could easily be argued that standardization only amplified the dominant approach to teaching already found in social studies classrooms. Researchers have known for quite some time that social studies teachers tend to rely heavily on textbooks and memorization. Goodlad (1984), for example, observed over thirty years ago—before the standards movement had taken root—that the topics social studies teachers taught, often drawn directly from textbooks, had a tendency to "become removed from their intrinsically human character, reduced to the dates and places readers will recall memorizing for tests" (pp. 212-13). That Levstik found the same things happening almost a quarter of a century later speaks volumes about the state of the field. It also corroborates the conclusions of several other researchers who have noted dependence on textbooks and tests, an emphasis on coverage

of content over mastery of it, and defensive teaching in their analysis of what goes on in social studies classrooms (Cuban, 1991; Grant, 2003; Loewen, 2007; McNeil, 1988; Segall, 2004).

Introducing standardized tests may have made the disease worse, but it did not change the nature of the problem. It seems, in fact, that blaming tests for the way teachers teach gets things backward: many teachers were already teaching to the test, or at least teaching in uninspiring ways, long before the tests caught up with them. The failure of teacher educators to make a clear and compelling case to teachers for the use of more sophisticated teaching methods and introduction of meaningful subject matter speaks directly to the problems at the heart of the subject. Certainly overemphasis on accountability and on testing in reading and mathematics has had a negative impact on social studies in the elementary grades (McGuire, 2007), but to say teachers were caught flat-footed by these changes seems like an understatement. Thirty years of research on social studies education suggests that teachers were already struggling to conceptualize the subject and master its content long before *No Child Left Behind* came along.

As such, it is unsurprising, as Whitson (2004) has observed, that the field's fault lines have given life to a "broad movement to bypass, displace, or even eliminate social studies teacher education in…schools of education" (p. 15). In the face of this movement, he has suggested that teacher educators ask themselves a difficult question: "What do we have to offer?" (p. 15).

It's a fair question. Teacher education in social studies is widely dismissed as unchallenging and disconnected from the curricula prospective teachers will be asked to teach, so a fruitful first step might be for teacher educators to offer a more concrete, coherent, and comprehensive picture of the aims, purposes, and content of social studies for new teachers to bring renewed clarity and rigor to the field. Significant progress could be made toward this goal

by paying close attention to the importance of identifying appropriate subject matter to teach, but the infusion of subject matter into teacher education must be handled carefully. “The problem before us,” argue Bain and Mirel (2006), “is not simply adding more content knowledge to teacher preparation programs…but rather to transform the knowledge prospective teachers learn in ways that make it useful for the challenges of teaching” (p. 213). Offering a way of potentially breaking the deadlock, at least in history teaching, they continue:

> Beginning teachers must be steeped in the disciplines they teach…However, we maintain that unless…students understand what Jerome Bruner (1960) called the fundamental structure of the discipline, new teachers will enter their own classrooms without sufficient knowledge to teach their subjects well. Such a focus does not privilege process at the expense of facts but rather rests on the understanding that disciplines organize facts in ways that give them meaning, making these facts more memorable because they are more meaningful. (p. 213)

The weight Bain and Mirel place on disciplinary structures goes beyond simply understanding what they are and how they are used to organize facts, however. Specifically, Bain and Mirel argue that prospective history teachers should be “conversant in historiography” and should

> …have knowledge of and experience in using content to determine the facts that students know, the meaning students give to these facts, and the theories students have about history, agency, significance, cause and effect, and, last, what goes into the construction of plausible historical accounts. (pp. 213-14)

In other words, teachers should not only have a storehouse of facts at their fingertips (or on the tips of their tongues) but also a wide-ranging understanding of how others have organized and interpreted those facts to transform them into “history.” This sounds suspiciously like

pedagogical content knowledge. Of course teachers do not have to accept the organization of those facts, or all of the interpretations that have been made of them, without interrogation; indeed, one mark of a good teacher is the ability (and proclivity) *not* to accept knowledge uncritically. Preparing prospective teachers to do that would seem to be a crucially important task of teacher educators.

Recent work focused on historical thinking and historical "literacy," cited earlier, offers a window into this potential future. The problem, of course, is that not every social studies teacher is (or is only) a history teacher. Thornton and Barton (2010) may have gone overboard in their critique of the disciplines, but they are correct to argue that citizenship education requires interaction with subject matter that goes well beyond the discipline of history. A history-centered curriculum is simply not enough to guarantee that students leave school ready to take on the responsibilities of citizenship. Given this, educators need to ask some important questions. What are the "structural" bases of knowledge needed to support and reinforce education for citizenship in a democracy? What is the "substance" of social studies, and what do its substantive structures look like? How are ideas about the nature of social and political life organized by scholars into "syntactic" structures? What are the pedagogical approaches most likely to help teachers reveal these mysteries to students?

To answer those questions, the social studies community may need to do a little soul searching—or, more accurately, it may need to do a little *less* soul searching, and put a lot more effort into deciding what the boundaries of the subject are. Maybe, for example, it is time for social studies educators to identify the "signature pedagogies" that define effective practice in the field. As Shulman (2005) wrote, such pedagogies would enable teacher educators to

> …combine very deep preparation in the content areas teachers are responsible to teach (and tough assessments to ensure that deep knowledge of content has been achieved), systematic preparation in the practice of teaching using powerful technological tools and a growing body of multimedia cases of teaching and learning, seriously supervised clinical practice that does not depend on the vagaries of student teaching assignments, and far more emphasis on rigorous assessments of teaching that will lead to almost universal attainment of board certification by career teachers. (p. 7)

Of course none of this can happen until and unless consensus is reached on what the signature pedagogies might be. As Shulman added, "the teacher education profession must come to the consensus; only then can accreditation enforce it" (p. 7). In social studies, all signs would seem to point to discussion and deliberation (Hess & McAvoy, 2014; Parker, 2003) as the most useful inquiry-based pedagogical approaches focused on decision-making related to complex social issues. There are others. The effective use of primary sources and document-based questions is typically associated with history classes, but all social educators would benefit from training in the use of these materials. Sorting competing claims and marshalling evidence to support claims and commitments are key skills not only of historians and social scientists but of citizens as well. Role playing, dramatization, and carefully structured and managed group work should be present in most, if not all, social studies classrooms too. All of these techniques position students to engage in the kind of work they will also need to engage in as citizens—which is, after all, the whole point of social studies.

At the same time, teacher educators should remain mindful of the fact that much knowledge about the nature of social life needs to be transmitted to students to help them understand the contexts in which their decisions are made. Teachers have experienced the world

in ways their students have not and should be prepared to share their expertise on the historical, social, and cultural nature of things with their students. What research on PCK tells us is that truly effective teachers understand the subjects they teach in sophisticated ways. They do not limit themselves to only storing volumes of information and sharing information with students; they engage students in learning by connecting their knowledge to the knowledge students bring with them, and by filling the gaps in student knowledge, and they base all of this on a foundation of carefully structured knowledge that keeps them connected to the disciplinary scholars generating new insights into the nature of social, cultural, and political life. They employ the methods of social science to ensure that evidence is marshalled in support of the claims they make. They understand that economists and historians and sociologists and political scientists also have to defend the claims they make to their peers and follow certain procedures to ensure that the conclusions they draw are defensible.

Putting all of this together may seem like a superhuman feat but actually there are teachers everywhere who do it every day. But they exhibit pedagogical content knowledge when they *teach the subjects they teach*, not when they're teaching teachers. A critical flaw in the research on PCK is what might accurately be called the Teacher Education Blind Spot. Teacher education is too frequently conceived as a strategies-focused endeavor meant to impart knowledge of the context and substance of schooling from teacher educators to teachers, with teacher educators positioned as "experts" and prospective teachers as "novices." This dynamic is not incorrect, but from a pedagogical standpoint the notion of knowledge transmission as the central focus of teacher education is quite problematic. It explains why teacher educators who do not have recent experience in school settings, or any at all, often lack credibility with the students they teach.

There may be a step teacher educators can take to address this problem. The Chinese philosopher Xunzi is often credited with having said: “Not having heard something is not as good as having heard it; having heard it is not as good as having seen it; having seen it is not as good as knowing it; knowing it is not as good as putting it into practice.” The modern version of this statement is a line attributed, probably apocryphally, to Benjamin Franklin: “Tell me and I forget. Teach me and I remember. Involve me and I learn.” The sentiment, either way, is the same: telling is not teaching, and doing is the most effective learning strategy available to us. Instead of focusing on teaching strategies and the nature of the formal curriculum, at least some of the courses offered by teacher educators might more profitably be conceived as master classes exploring topics that might actually be taught in school settings. The best way to learn historical thinking, in other words, is to think historically; the best way to understand deliberation is to deliberate; the best way to learn research skills is to conduct research. The best way to develop pedagogical content knowledge is to be immersed in the study of content while also being granted access to the pedagogical decision-making of a master teacher. Such courses would be one step removed from both the content-area coursework teachers take and from traditional coursework in education. Such courses would quite literally meld the two.

This is just one suggestion, but such an approach could conceivably turn teacher education on its head. Reflecting on my own practice has helped me realize that my students learn more about teaching in my seminar about protest music and social change—a course focused on the idea that there are hidden narratives in American history that can be drawn out by employing the methods of historians and philosophers to the study of culture in order to understand our democracy more fully—than they may in the traditional methods course I teach, which inevitably gets bogged down in discussion of lesson planning strategies and classroom

management techniques. These things matter, to be sure; the point is that they are easier to discuss in the context of a course in which students are actually participating in learning activities more like the ones they will ask their own students to participate in.

And what would this infusion of content into teacher education combined with the identification of signature pedagogies do to help establish the outlines of pedagogical content knowledge in social studies? Again, the concept of PCK is built on the marriage of deep subject matter knowledge with knowledge of the contexts of teaching and the teaching strategies most likely to enable students to learn the subject matter being taught. Immersing students in courses that require teacher educators to demonstrate these skills themselves would offer prospective teachers the opportunity to think about teaching methods, subject matter content, and context in ways that simply are too rare.

More to the point, asking teacher educators to engage in this kind of work, and report the results, would go a long way toward establishing what the aims and purposes of social education should be. It would also help establish a foothold for discipline-based subject matter content in social studies teacher education, offering the promise of addressing the missing paradigm problem. It would, in short, go a long way toward helping to reframe social studies education in a refreshing and compelling new way. A little discipline, it seems, might do the field a lot of good.

References

Au, W. (2009). Social studies, social justice: W(h)ither the social studies in high stakes testing? *Teacher Education Quarterly, 36*(1), 43-58.

Bain, R. B. & Mirel, J. (2006). Setting up camp at the great instructional divide: Educating beginning history teachers. *Journal of Teacher Education 57*(3), 212-19.

Ball, D. L. (1993). With an eye on the mathematical horizon: Dilemmas of teaching elementary school mathematics. *Elementary School Journal, 93*(4), 373-397.

Ball, D. L. (2000). Bridging practices: Intertwining content and pedagogy in teaching and learning to teach. *Journal of Teacher Education, 51*(3), 241-247.

Ball, D. L., Thames, M. H., & Phelps, G. (2008). Content knowledge for teaching: What makes it special? *Journal of Teacher Education, 59*(5), 389-407.

Barton, K. C., & Levstik, L. S. (2004). *Teaching history for the common good*. New York: Routledge.

Bentley, M. (1999). *Modern historiography: An introduction*. New York: Routledge.

Beyer, B. K. (1994). Gone but not forgotten: Reflections on the new social studies movement. *The Social Studies, 85*(6), 251-256.

Bruner, J. S. (1960). *The process of education*. Cambridge: Harvard University Press.

Carpenter, T. P., Fennema, E., & Franke, M. L. (1996). Cognitively guided instruction: A knowledge base for reform in primary mathematics instruction. *The Elementary School Journal, 97*(1), 3-20.

Carpenter, T. P., Fennema, E., Peterson, P. L., & Carey, D. A. (1988). Teachers' pedagogical content knowledge of students' problem solving in elementary arithmetic. *Journal for Research in Mathematics Education, 19*(5), 385-401.

Chen, W. (2002). Six expert and student teachers' views and implementation of constructivist teaching using a movement approach to physical education. *The Elementary School Journal, 102*(3), 255-272.

Clermont, C. P. (1994). Comparative study of the pedagogical content knowledge of experienced and novice chemical demonstrators. *Journal of Research in Science Teaching, 31*(4), 419-441.

Cornbleth, C. & Waugh, D. (1995). *The great speckled bird: Multicultural politics and education policymaking*. New York: St. Martin's Press.

Cuban, L. (1991). History of teaching in social studies. In J. P. Shaver (Ed.), *Handbook of research on social studies teaching and learning* (pp. 197-209). New York: Macmillan.

Deng, Z. (2007). Transforming the subject matter: Examining the intellectual roots of pedagogical content knowledge. *Curriculum Inquiry, 37*(3), 279-295.

Evans, R. W. (2004). *The social studies wars: What should we teach the children?* New York: Teachers College Press.

Even, R. & Tirosh, D. (1995). Subject-matter knowledge and knowledge about students as sources of teacher presentations of the subject-matter. *Educational Studies in Mathematics, 29*(1), 1-20.

Foner, E. (2002). *Who owns history? Rethinking the past in a changing world*. New York: Hill & Wang.

Gardner, H. (1991). *The unschooled mind.* New York: Basic Books.

Geddis, A. N. (1993). Transforming subject-matter knowledge: The role of pedagogical content knowledge in learning to reflect on teaching. *International Journal of Science Education, 15*(6), 673-683.

Gess-Newsome, J. & Lederman, N. G. (Eds.) (2001). *Examining pedagogical content knowledge: The construct and its implications for science education.* Boston: Kluwer Academic Publishers.

Goodlad, J. I. (1984). *A place called school.* New York: McGraw-Hill.

Grant. S. G. (2003). *History lessons: Teaching, learning, and testing in U.S. high school classrooms.* Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Grant, S. G. (2007). High-stakes testing: How are social studies teachers responding? *Social Education, 71*(5), 25-254.

Grant, S. G. (2009). *Measuring history: Cases of state-level testing across the United States.* Charlotte, NC: Informaton Age Publishing.

Grossman, P. & McDonald, M. (2008). Back to the future: Directions for research in teaching and teacher education. *American Educational Research Journal, 45*(1), 184-205.

Gudmundsdottir, S. (1991). Ways of seeing are ways of knowing: The pedagogical content knowledge of an expert English teacher. *Journal of Curriculum Studies, 23*(5), 409-421.

Gudmundsdottir, S. & Shulman, L. (1987). Pedagogical content knowledge in social studies. *Scandinavian Journal of Educational Research, 31*(2), 59-70.

Hess, D. E. & McAvoy, P. (2014). *The political classroom: Evidence and ethics in democratic education*. New York: Routledge.

Hill, H. C., Ball, D. L., & Schilling, S. G. (2008). Unpacking pedagogical content knowledge: Conceptualizing and measuring teachers' topic-specific knowledge of students. *Journal for Research in Mathematics Education, 39*(4), 372-400.

Himmelfarb, G. (1989). Some reflections on the new history. *American Historical Review 94*(3), 661-670.

Himmelfarb, G. (1994). *On looking in to the abyss: Untimely thoughts on culture and society.* New York: Knopf.

Howey, K. R. & Grossman, P. L. (1989). A study in contrast: Sources of pedagogical content knowledge for secondary English. *Journal of Teacher Education, 40*(5), 24-31.

Kleickmann, T., Richter, D., Kunter, M., Elsner, J., Besser, M., Krauss, S., & Baumert, J. (2013). Teachers' content knowledge and pedagogical content knowledge: The role of structural differences in teacher education. *Journal of Teacher Education, 64*(1), 90-106.

Krauss, S., Brunner, M., Kunter, M., Baumert, J., Neubrand, M., Blum, W., & Jordan, A. (2008). Pedagogical content knowledge and content knowledge of secondary mathematics teachers. *Journal of Educational Psychology*, *100*(3), 716-725.

Labaree, D. F. (2004). *The trouble with ed schools*. New Haven, CT: Yale University Press.

Lehrer, R. & Franke, M. L. (1992). Applying personal construct psychology to the study of teachers' knowledge of fractions. *Journal for Research in Mathematics Education, 23*(3), 223-241.

Levstik, L. S. (2008). What happens in social studies classrooms?: Research on K-12 social studies practice. In L. S. Levstik & C. A. Tyson (Eds.), *Handbook of research in social studies education* (pp. 50-62). New York: Routledge.

Loewen, J. W. (2007). *Lies my teacher told me: Everything your American history textbook got wrong.* New York: Touchstone.

Loewen, J. W. (2009). *Teaching what* really *happened: How to avoid the tyranny of textbooks and get students excited about doing history*. New York: Teachers College Press.

Lortie, D. C. (1975). *Schoolteacher: A sociological study.* Chicago: University of Chicago Press.

Marks, R. (1990). Pedagogical content knowledge: From a mathematical case to a modified

conception. *Journal of Teacher Education, 41*(3), 3-11.

McNeil, L. M. (1988). *Contradictions of control: School structure and school knowledge*. New York: Routledge.

McDiarmid, G. W. & Vinten-Johansen, P. (2000). A catwalk across the great divide: Redesigning the history teaching methods course. In P. Stearns, P. Seixas, & S. Wineburg (Eds.), *Knowing, Teaching, and Learning History: National and International Perspectives*. New York: NYU Press.

McGuire, M. E. (2007). What happened to social studies?: The disappearing curriculum. *Phi Delta Kappan, 88*(8), 620-624.

Monte-Sano, C. (2011). Learning to open up history for students: Preservice teachers' emerging pedagogical content knowledge. *Journal of Teacher Education, 62*(3), 260-272.

Monte-Sano, C. & Budano, C. (2013). Developing and enacting pedagogical content knowledge for teaching history: An exploration of two novice teachers' growth over three years. *Journal of the Learning Sciences, 22*(2), 171-211.

Nash, G., Crabtree, C., & Dunn, R. (1997). *History on trial: Culture wars and the teaching of the past.* New York: Vintage.

Nelson, J. L. (2001). Defining social studies. In W. B. Stanley (Ed.), *Critical issues in social studies research* (pp. 15-38). Greenwich, CT: Information Age Publishing.

Novick. P. (1988). *That noble dream: The 'objectivity question' and the American historical profession*. Cambridge, MA: Cambridge University Press.

Ormrod, J. E & Cole, D. B. (1996). Teaching content knowledge and pedagogical content knowledge: A model from geographic education. *Journal of Teacher Education, 47*(1), 37-42.

Parker, W. C. (2003). Teaching democracy: Unity and diversity in public life. New York: Teachers College Press.

Peterson, P. L., Fennema, E., Carpenter, T. P., & Loef, M. (1989). Teachers' pedagogical content beliefs in mathematics. *Cognition and Instruction, 6*(1), 1-40.

Sadler, P. M., Sonnert, G., Coyle, H. P., Cook-Smith, N., & Miller, J. L. (2013). The influence of teachers' knowledge on student learning in middle school physical science classrooms. *American Educational Research Journal, 50*(3), 1-30.

Saxe, D. W. (1991). *Social studies in schools: A history of the early years.* Albany, NY: SUNY Press.

Schwab, J. J. (1964). Structure of the disciplines: Meanings and significances. In G. W. Ford & L. Pugno (Eds.), *The structure of knowledge and the curriculum* (pp. 6-30). Chicago, Rand McNally.

Schwab, J. J. (1978). Education and the structure of the disciplines. In *Science, curriculum, and liberal education: Selected essays* (pp. 229-272). Chicago: University of Chicago Press.

Segall, A. (2004). Blurring the lines between content and pedagogy. *Social Education, 68*(7), 479-482.

Seixas, P. (2001). Review of research in social studies. In V. Richardson (Ed.), *Handbook of research on teaching* (pp. 545-565). Washington, DC: AERA.

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher, 15*(2), 4-14.

Shulman, L. (2005). Teacher education does not exist. *The Stanford Educator.* Palo Alto, CA: Stanford University School of Education.

Siedentop, D. (2002). Content knowledge for physical education. *Journal of Teaching in*

Physical Education, *21*(4), 368-77.

Stein, M. K. & Nelson, B. S. (2003). Leadership content knowledge. *Educational Evaluation and Policy Analysis, 25*(4), 423-448.

Thornton, S. J. (2001). Educating the educators: Rethinking subject matter and methods. *Theory Into Practice, 40*(1), 72-78.

Thornton, S. J. & Barton, K. C. (2010). Can history stand alone? Drawbacks and blind spots of a "disciplinary" curriculum. *Teachers College Record 112*(9), 2471-2495.

VanSledright, B. A. (2010). *The challenges of rethinking history education: On practices, theory, and policy.* New York: Routledge.

VanSledright, B. A. (2013). *Assessing historical thinking and understanding: Innovative designs for new standards*. New York: Routledge.

Westheimer, J. & Kahne, J. (2004). What kind of citizen? The politics of educating for democracy. *American Educational Research Journal, 41*(2), 237-269.

Whitson, J. A. (2004). What social studies teachers need to know: The new urgency of some old disputes. In S. Adler (Ed), *Critical issues in social studies teacher education* (pp. 9-35). Greenwich, CT: Information Age Publishing.

Wilson, S. M. (2001). Research on history teaching. In V. Richardson (Ed.), *Handbook of Research on Teaching* (pp. 527-544). Washington, D.C.: AERA.

Wilson, S. M. & Wineburg, S. (1988). Peering at history through different lenses: The role of disciplinary perspectives in teaching history. *Teachers College Record, 89*(4), 525-539.

Wineburg, S. (2001). *Historical thinking and other unnatural acts.*

Zinn, H. (2005). *A people's history of the United States: 1492—present.* New York: Harper Perennial Modern Classics.