

## A Study in Contrast: Sources of Pedagogical Content Knowledge for Secondary English

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Grossman investigated the influence of subject-specific coursework in the development of pedagogical content knowledge in English through contrasting case studies of six beginning English teachers, only three of whom graduated from teacher education. She describes the differences in the teachers' knowledge regarding the purposes for teaching secondary English, curricular knowledge, and knowledge of student understanding.

Jake and Steven, both beginning English teachers, each decided to teach *Hamlet* to their senior English classes. During the seven weeks Jake spent on the play, he led the students through the play word by word, focusing particularly on the theme of linguistic reflexivity. His goals for the students were to have them see the interconnections among the themes of the play, to learn the skills involved in textual analysis — or as Jake put it, “explication du text,” and to understand the “power and beauty” of the play’s language. His assignments included an in-class analysis of one soliloquy, memorization and recitation of a soliloquy, a five-page paper on any theme in *Hamlet*, and a final exam. One of the final exam questions asked students to write a well developed paragraph on the importance of language in *Hamlet*.

Steven spent two and a half weeks on the play. His goals for his students were to help them see the connection between Hamlet’s dilemmas and some of the dilemmas they might face in their own lives, and to interest students in the play. Steven began his unit on *Hamlet* without mentioning the play by name. Instead, he asked students how they might feel if their parents divorced and their mother suddenly started dating another man. After asking students to write about their responses to this situation, Steven asked students to write about how they might feel if they discovered that their mother’s new boyfriend had taken over their father’s job and “there’s some talk that he had something to do with the ousting of your dad, and you can’t quite prove it, but you sort of get that sense.” After this initial introduction, Steven asked his students to write about the point at which they could imagine themselves killing another human being. In informing the students that they would be reading the play, he tried to connect the two scenarios of divorce and murder to introduce the plot of the play.

I said, “O.K., now we’re going to be reading this book . . . about this guy and his family breaks up. It’s not divorce, but it’s sort of a strange set of circumstances, and he’s really confused and doesn’t know what to do.” And so I sprung it on them that it’s *Hamlet*.

After this introduction, Steven showed parts of the videotape of the play, providing students with summaries that they read prior to watching. In discussions, Steven tried to move back and forth between the play and the students’ own experiences. During this time, the students never read the play itself. In lieu of a final exam, Steven asked students to write an essay about a characteristic of Hamlet’s that exists in people today; Steven asked students to find evidence from the text that would support their arguments. The class spent

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about a week working on these papers, using class time to brainstorm and share ideas, organize, and revise their first drafts.

What accounts for these radically different treatments of *Hamlet*? One might argue that perhaps Jake had more knowledge of *Hamlet*, but in fact Jake and Steven had similarly strong backgrounds in both English literature in general and Shakespeare in particular. The differences between Steven and Jake reside less in subject matter knowledge than in preparation for teaching. While Steven and Jake both graduated from prestigious undergraduate institutions with degrees in English, only one of them elected to pursue professional preparation for teaching.

The entry into teaching of college graduates with little professional preparation reflects the heated debate over the value of teacher education. Some critics of teacher education argue that education courses simply keep bright college graduates from entering teaching. They welcome alternative route programs that offer to waive university-based teacher education for selected individuals. The two underlying assumptions of this position suggest that a strong subject-matter background and a willingness to teach are sufficient preparation for teaching, and that there is little to learn from pedagogical coursework. This study investigates both assumptions by studying the knowledge of teaching English held by six beginning English teachers, all of whom had strong backgrounds in English. Three of the teachers entered teaching having completed a rigorous program of teacher education, while three others entered teaching with no formal professional preparation. The purpose of the study was to investigate the role of teacher education, particularly the subject-specific components of teacher education, in the development of pedagogical content knowledge in English.

### Conceptual Framework and Methodology of Study

This research draws its theoretical framework from the emerging research on the underlying knowledge base for teaching (Shulman, 1986, 1987). Although subject matter knowledge and general pedagogical knowledge constitute central aspects of teachers' knowledge, teachers also hold more particular knowledge about how to teach specific subject matter (Hashweh, 1986; Leinhardt and Smith, 1985). This form of knowledge, termed *pedagogical content knowledge*, includes overarching conceptions of what it means to teach a particular subject, knowledge of curricular materials and curriculum in a particular field, knowledge of students' understanding and potential misunderstandings of a subject area, and knowledge of instructional strategies and representations for teaching particular topics (Grossman, 1988).

Teachers can acquire pedagogical content knowledge from a variety of sources. Beginning teachers can draw upon their subject matter knowledge and can also refer back to their own apprenticeships of observation (Lortie, 1975) that provide models of teaching particular topics. Teacher education, particularly the subject-specific component of teacher education, represents a third potential source for the acquisition of pedagogical content knowledge. This subject-specific pedagogical coursework, which includes courses such as Curriculum and Instruction in Social Studies or Methods of

Teaching Writing, is designed to provide beginning teachers with a perspective on what it means to teach a particular subject, as well as offering specific teaching strategies for that subject. The intent of subject-specific courses, then, could be conceptualized as the transmission of pedagogical content knowledge. While this component of professional coursework may represent the most logical place for students to acquire pedagogical content knowledge, we know very little about the actual content of subject-specific methods courses (Lanier and Little, 1986; Zeichner, 1988).

If pedagogical content knowledge is an important component of the knowledge base of teaching, does professional education, in fact, transmit this area of professional knowledge? How can strong subject-specific teacher preparation coursework influence how beginning teachers develop pedagogical content knowledge? What happens when people enter teaching without professional preparation? Does strong subject matter knowledge alone provide the pedagogical understanding of a subject necessary for teaching? These questions about the possible value added by teacher education and the particular contribution of subject-specific coursework form the backdrop of this research.

This study used a case-study methodology since its purpose was to generalize to a theoretical framework about teacher knowledge and its sources. The case study approach to research on teacher knowledge represents an attempt to gather in-depth data on the content and organization of an individual's knowledge. The design involved six case studies of beginning English teachers and cross-case analyses. The data included five structured interviews, two of which asked teachers to engage in tasks designed to elicit their underlying knowledge and beliefs about teaching English. In addition, I observed five of the six teachers teach a unit of instruction in their own classrooms, interviewing them before and after the period of observation.<sup>1</sup> Data on the teacher education program included non-participant observation of two quarters of the Curriculum and Instruction course in English, interviews with the professor and supervisors, and documents from the courses, including hand-outs, syllabi, readings, and student work.

The six teachers in this study represent, in many ways, the best and brightest of prospective teachers.<sup>2</sup> All are well prepared in their subject matter; four of the six hold BAs in literature from prestigious college and universities, while one teacher was completing his doctorate in literature at the time of this study. Three of the teachers — Jake, Kate, and Lance — elected to enter teaching without formal preparation, while the other three — Megan, Steven, and Vanessa — graduated from the same teacher education program at a research university that emphasized strong subject-specific preparation in the teaching of English. All six of the teachers were technically first-year teachers, although three of them had had prior experience as teaching interns or aides. Of the six teachers, three taught in suburban public schools and three taught in independent schools. (See Grossman, 1988, for extended case studies of the six teachers.) Two of the teachers, one with and one without teacher education, taught at the same independent school, which provided the opportunity for at least one cross-case analysis in which teaching context was controlled.<sup>3</sup>

The results of this study suggest that, in this case, subject specific coursework did make a difference in these beginning teachers' pedagogical content knowledge of English. The two groups of teachers differed in their conceptions of the purposes for teaching English, their ideas about what to teach in secondary English, and their knowledge of student understanding.

### Why Teach English

Part of what accounts for how teachers plan and conduct instruction is a vision of what it means to teach a particular subject matter (Ball, in press; Grossman, in press a; Wineburg and Wilson, in press). Beliefs about the goals for teaching a subject function as an organizing framework, or conceptual map, for instructional decision-making, serving as the basis for judgments about textbooks and curriculum materials, classroom objectives, appropriate assignments, and evaluations of student learning. Teachers' subject-specific goals for students and their beliefs about the central purposes for studying English, as well as their knowledge and beliefs about the nature of English as a secondary-school subject, compose their overarching conceptions of what it means to teach English — one component of pedagogical content knowledge.

While the six teachers in this study shared a relatively common understanding of English as a discipline, they differed in their conceptions of English as a school subject. Two of the teachers who had no professional preparation made little or no distinction between conceptions of English as an intellectual discipline and English as a secondary-school subject. As Jake commented, "The way I think about English is the way I think about teaching English." For Jake and Lance, both English and teaching English revolved around the analysis of literary texts. The other teachers saw secondary-school English less as an occasion for literary criticism and more as an opportunity to encourage self-expression and communication through reading and writing.

This fundamental difference in beliefs about the purposes for teaching English affected whether the teachers saw literature or writing as the core of the English curriculum. While all six teachers agreed that the study of English comprises both literature and composition, the teachers without professional education tended to see literature as the core of the English curriculum, while the graduates of teacher education saw writing as the core.

Jake and Lance believed that the central goal of studying English involves learning how to engage in literary criticism. Jake wanted to teach students the skills involved in "explanation du text," while Lance wanted "to show kids how to do literary criticism." In contrast, Vanessa, Steven, and Megan saw teaching students to express themselves in writing as the central purpose of high school English. As Steven suggested, his goals for teaching English shifted from literature to writing during the course of teaching and teacher education.

Again [my conception of teaching English] changed from my original idea. I was really excited about literature and that kind of stuff and when I got to the classroom and started working with students, what became most important was their writing and their expression of their ideas, and to come up with their ideas . . . So my job as an English teacher is to teach students to express themselves better.

In the area of literature, the teachers differed in the emphasis they placed on textual analysis and the role student experience should play in literary interpretation. Jake and Lance placed primary emphasis on the text itself, while the other teachers saw the text as a springboard for developing skills and broadening students' perspectives.

Jake and Lance saw the text as the major focus. Their goals reflect their concern for close textual analysis and the techniques of literary criticism. This emphasis is apparent in Jake's decision to spend seven weeks on *Hamlet*, and to read the play word for word. Jake's goal for teaching *Hamlet* was "to show them how every word is important, and to show them how really intricate a play can be." While both Jake and Lance recognized the potential usefulness of having students see connections between texts and their own lives, making this connection did not appear in their goals for teaching literature. As he told one of his students, Lance argued that "a good way to approach literature is to bracket your own experience of the world. . . ."

While literature still played a central role in their conceptions of teaching English, Megan, Steven, Vanessa, and Kate saw the teaching of literature less as an exercise in textual analysis and more as an invitation to students to explore their own experiences; the focus is not on the literary text but on the student in relation to that text. As Steven commented:

Usually the way I try to teach literature is I try to have the students relate to the work. . . . I think in college and perhaps in A.P. classes that the students there are motivated and have real good skills in reading, writing, and thinking; that they tend to be able to make the connections there. But in most of the regular classes, I think it's my job to make the connection between the work and their lives.

While all of the teachers agreed on the importance of having students support their ideas with evidence from the text, the difference is one of emphasis, as illustrated by Steven's decision to have his students forego reading the actual text of *Hamlet*. Implicit in these teachers' conceptions of teaching literature was the belief that making connections between literature and students' own experience is the major purpose for teaching literature at the high school level. In this conception of teaching literature, student experience plays a central role in the interpretation of literature, as students are encouraged to make sense of literature in terms of their own lives. As Megan commented, making the link to student experience helps "open the door" to literature.

It's like opening up the door before they have to go in. Especially saying, imagine you're in this kind of situation, what would it be like and how would it feel. . . . Rather than just crash right into it. . . . It probably wouldn't make much sense to them. You need to be prepared for it. . . . it's a sense of ownership.

Jake and Lance's conceptions of teaching literature were almost identical to their conceptions of what it meant to study literature. Both grounded their assumptions about teaching literature in their disciplinary knowledge of English. Jake claimed that his college courses in English influenced his ideas about both English and teaching English; "[My college English courses] shaped the way I look at literature which helped shape the way I'm going to teach it." Jake and Lance attributed most of their conceptions of



teaching English to their knowledge of English and their undergraduate experiences.

Steven, Megan, and Vanessa attributed their ideas about the need to bridge between student experience and literary texts to their Curriculum and Instruction courses. Megan stated that she learned about the importance of preparing students prior to teaching a text through her professor of Curriculum and Instruction, who introduced her to the concepts of "ownership" and "scaffolding" (Langer and Applebee, 1986), giving her a different way of thinking about teaching literature. Steven described what he learned about teaching English and the need to prepare students for a text.

The ideas that [the professor of Curriculum and Instruction] was putting forth changed the way that I started looking at literature. That the students had to have a handle on it.

Kate represents a discrepant case, as her conception of English — centered around communication rather than literature — allied her with Megan, Steven, and Vanessa. Her classroom apprenticeship of observation in high school and college provided her with a model of teaching English that focused on the literary text. Kate wavered between her explicit goals for teaching English and her implicit model for teaching English acquired through her experiences as a student. This disjunction between her goals and practice was evident in an interview about teaching a poem and in observations of her classroom teaching. In observations of her teaching, Kate focused primarily on the literary text, ignoring some of the students' attempts to make connections between the text and their own experiences. In the simulated teaching of a poem, Kate also emphasized the text, focusing on the words and title of the poem and making no connections to students' lives. Thus while her ideas allied her with the graduates of teacher education, her classroom practice did not.

The case studies of these six teachers suggest the complex interrelationship among beliefs about teaching, subject matter knowledge, and teaching context in the development of conceptions about teaching English. Teachers' own experiences as students in English classes provide implicit models for the teaching of literature and writing. Even when beliefs about teaching, subject matter knowledge, and reasons for teaching all predispose a teacher such as Kate to a certain conception of teaching English, the apprenticeship of observation proves difficult to overcome. Subject-specific teacher education helped Megan, Steven, and Vanessa break with their prior experience as students and develop both new conceptions of teaching English and specific strategies for putting these ideas into practice. These conceptions can then be either reinforced or challenged by the contexts in which teachers teach. The teachers' differing conceptions of what it means to teach high school English resulted in differing knowledge and beliefs about the secondary English curriculum.

### What Should We Teach

Curricular knowledge, another component of pedagogical content knowledge, includes knowledge and beliefs about the selection and organization of content for instruction.

The six teachers in this study differed in their ideas about the appropriate content for secondary English and how that content should be organized.

In planning hypothetical courses for one of the interviews, the teachers suggested a rough outline for the course and selected texts for the courses. For a ninth grade English course, the teachers proposed organizations that paralleled their conceptions of teaching English; Jake, Kate, and Lance planned to organize the course around literature, while Megan, Steven, and Vanessa planned to organize the course around writing. Interesting differences also emerged among the teachers' choices of texts for this class. Certain texts were chosen only by the teachers with teacher education. For example, the graduates all chose *To Kill a Mockingbird* and *Reflections on a Gift of a Watermelon Pickle*, both of which were mentioned in their Curriculum and Instruction courses. In contrast, all three teachers without teacher education selected *Great Expectations*.

In part, the different patterns of curricular choices made by the two groups of teachers reflect the different grounds upon which they made their decisions, as well as their different teaching contexts. Steven and Megan based their choices upon what they knew about students' interests, while Jake and Lance based their decisions on their knowledge of literature. Teaching context also influenced teachers' knowledge and beliefs about the selection and organization of curriculum materials. The patterns in the texts chosen by these six teachers demonstrate that in using different grounds for curricular choices, the teachers also selected different materials. Underlying the teachers' selection of curricular materials was a vision of the students to whom they would teach these texts. As Steven commented during the process of planning a hypothetical class, he would first need to know "what kind of class I had. Is it college prep? Is it remedial? Where should my focus be?" The implicit question, which asks "what about the students?" suggests the relationship between curricular knowledge and knowledge and beliefs about student understanding.

### What about the Students

In order to plan for instruction, teachers rely on their understanding of what students already know and what they are likely to find difficult in a particular subject matter. Knowledge and beliefs about student understanding can inform both curricular planning and expectations and evaluations of students (Clark and Peterson, 1986). This knowledge of student understanding in a particular content area — one component of pedagogical content knowledge — differs from more general knowledge of learners in its focus on specific content. The emphasis is not on how students learn in general, but, for instance, how students develop fluency in written expression.

While all six teachers reported learning most of what they knew about student understanding from their teaching experience, the teachers differed in their confidence in assessing student understanding and in the very content and nature of their knowledge. The teachers without professional preparation found it difficult to anticipate students' prior knowledge, and expressed surprise over what students did and did

not know. Once they acquired knowledge of what students found difficult, the teachers did not seem to integrate this knowledge into their instructional plans. In contrast, the graduates of teacher education expressed little surprise over students' knowledge and interests. Furthermore, their knowledge of student understanding was firmly embedded in their conceptions of teaching and their instructional strategies. Finally, the two groups of teachers seemed to have differing implicit "steering groups" (Lundgren, 1972) of students for whom they planned instruction.

Jake, Lance, and Kate all discussed the challenges of learning what to expect from their students. Jake talked at length about his difficulty in understanding what his students knew, identifying this as the "biggest problem" he faced in his teaching: "As I've said before, the biggest problem I have with teaching by far is trying to get into the mindset of a ninth grader."

Kate, Jake, and Lance all referred to their own memories of their experiences as high school students to help shape their expectations for students. In relying on his own high school experience, however, Lance found himself surprised by what students did not know.

Well, to my tremendous surprise . . . students have a really hard time just becoming literate. I was surprised. Because I think I was pretty literate. I didn't know literature in high school, but I knew the language.

Lance's surprise illustrates a potential danger of learning from one's own experience. As successful students themselves, the teachers expected their own students to be as knowledgeable and as interested in literature as they remembered themselves being in high school. In using their own experiences as students as a template for their expectations of student understanding, Jake, Kate, and Lance found it difficult to anticipate what students might have trouble with or find interesting. As Jake commented, his own knowledge of literature made it difficult for him to comprehend students' problems.

One of the things that makes it difficult for me is that my knowledge of literature is a little better than the twelfth graders or the ninth graders. . . . It's difficult to know where they're having problems. . . . You take for granted how much you know.

Both Jake and Lance talked about the need to adjust their expectations for students, something they learned through their classroom experiences with students. As they made the transition from college and graduate school to secondary school, Jake and Lance, in particular, confronted the disjunction between their expectations of students, constructed around their own literary knowledge and interests, and the students' actual knowledge and interests. Through his teaching experience, Jake learned that students had trouble understanding texts that he found easy. However, Jake had no way of explaining why the students found particular works difficult, something that caused him considerable frustration. As Jake commented, "I don't know what to do to help them. . . . Sometimes I feel like I'm banging my head against the wall."

Jake's evident frustration illustrates another danger of relying on experience alone for knowledge about student understanding. While Jake, Lance, and Kate learned that

students find particular topics or texts difficult, they could not explain why. Without a framework for making sense of how students learn to read literature and to write well and a repertoire of instructional strategies that support student learning, teachers may mislearn from experience (Feiman-Nemser and Buchmann, 1985). In fact, Jake, Kate, and Lance all seemed to have trouble learning from classroom experiences alone and integrating their new awareness of student understanding in to their instructional planning (Grossman, in press b). Jake, for example, explained that his students, many of whom knew English only as a second language, had problems with *Merchant of Venice* because they were simply "not that bright."

While Jake, Kate, and Lance all confronted the need to acquire knowledge about student understanding, they had few frameworks around which to interpret and organize their insights. While their teaching contexts confronted the teachers with challenges to their prior expectations of students, in order to learn from the experience the teachers must first frame the problem for themselves. How the teachers framed the problem of student understanding, however, led to instances of mislearning (Grossman, in press b). While Steven, Megan, and Vanessa also reported learning about student understanding through their classroom experiences, they seemed to learn different things about students and to hold different expectations about students' prior knowledge and interests. Perhaps as a result of their prior teaching experience during teacher education, these teachers made relatively few comments expressing their surprise over what students did and did not know. Most of their comments about student understanding appeared in the context of explanations of curricular or instructional choices, as Megan's comments about teaching poetry illustrate.

One thing that's hard for them is they're not used to stuff not being filled in. They want it all spelled out. They're not that curious to make the extra effort. So that's why you have to prepare them and give them a sense of ownership, because they have to care about it in order to want to work it out and if they don't care about it, they never will.

While Kate, Lance, and Jake's expressions of knowledge about student understanding existed as discrete observations or comments, Steven, Megan, and Vanessa's knowledge of students was embedded in their instructional plans and goals. All three teachers commented on the instructional implications of their knowledge of student understanding. In contrast, even once Jake understood that Shakespeare and poetry were difficult for his ninth graders, he still had trouble conceptualizing what he could do as a teacher to make the material more accessible. As Megan's comment illustrated, she tied her knowledge of students' difficulty with poetry to an understanding of how to help students overcome those difficulties.

What is perhaps most striking about these teachers' comments about student understanding is their consistency with what the teachers learned during teacher education. Megan, Steven, and Vanessa's comments reveal their understanding of students' affective responses to literature; unlike Jake and Lance, they do not assume that the students will find the literature intrinsically interesting. This perspective on students was emphasized during their Curriculum and Instruction

classes, as was the concept of connecting literature to personal experience. What the teachers learned about students' writing ability also reflects the emphasis of their Curriculum and Instruction courses. Megan commented upon students' problems in expressing themselves in writing and upon the instructional implications of these difficulties.

The students I have, they've got good ideas but they come out like a three-year-old's. And they need to learn how to express themselves clearly and in an organized way, and to get them to do that, they have to care about what they're writing about and they have to want to make it understandable.

Again, Megan's analysis is entirely consistent with the framework provided by her Curriculum and Instruction courses, which emphasized the importance of student ownership in writing.<sup>4</sup>

What this analysis suggests is that teacher education can provide a framework that shapes what beginning teachers subsequently learn from experience. As the professor of the subject-specific courses articulated, "I'm trying to build a theoretical framework for them that lets them make sense of all the different things they'll encounter" (Interview, 8/15/84). Like their counterparts without professional preparation, Megan, Steven, and Vanessa reported acquiring much of their knowledge about student understanding of English through their teaching experience, both during teacher education and through their first year of teaching. However, what they learned from experience was shaped by their conceptions of teaching English, which they constructed in the process of teacher education. The frameworks they were exposed to concerning the teaching of writing and literature helped these teachers interpret student misunderstandings and difficulties within both the language and philosophy of the frameworks, which embodied conceptions of how students learn to write and read. Without these frameworks, learning from experience can be haphazard, idiosyncratic, and even misleading, as the experiences of Jake, Kate, and Lance illustrate.

A final difference between these two groups of teachers' knowledge of student understanding concerns their implicit conceptions of students' ability and motivation. While Lance, Jake, and Kate all ideally saw themselves teaching students who are bright and motivated, Megan, Steven, and Vanessa presupposed that their students would be of average ability and less than motivated.

Kate, who worked in a college preparatory school with bright, motivated students,<sup>5</sup> chose not to teach in public schools because of her desire to work with students who want to learn; "What I love about teaching would not be there. I love working with kids who are interested in learning." Jake decided that if he were to continue to teach, he would prefer to teach at the college level, because he would also like to work with students who wanted to learn. Like Kate, Jake did not see motivating unmotivated students as part of his job. Lance also came to the conclusion that he would prefer to teach older students.

Lance and Jake seemed to have an elite group of students in mind as they thought about teaching. Part of their desire to work with bright, motivated students reflected their desire to deal with the subject matter of English in a way that they would find intellectually challenging

(Grossman, in press b).

In contrast, Steven, Megan, and Vanessa seemed to have a different type of student in mind. When Vanessa commented that "It's really difficult for the average high school student to really love Shakespeare," she used the average high school student as her point of reference. Megan's comments about students also suggest that she presupposed her students to be relatively unmotivated. Even in her discussions of the hypothetical college-preparatory American Literature class, Megan talked about students' resistance to reading literature. Steven responded to the definition of the class as college preparatory by suggesting that college preparatory can include a wide range of students, including those who are headed for a university and those who are headed for a community college. In making his curricular choices, Steven made sure that the texts would be accessible for the latter.

These differing implicit images of students help explain the teachers' varying expectations for students that appeared in both their curricular planning and instructional goals. Megan and Steven seemed to have relatively low expectations for students. In the planning interview, Steven chose six of the same books for both the hypothetical general-track freshman course and the hypothetical eleventh grade college-preparatory American Literature course. The overlapping titles included *To Kill a Mockingbird*, *My Antonia*, *Fahrenheit 451*, *Huck Finn*, *Reflections on a Gift of a Watermelon Pickle*, and *Points of View*. Lance also chose a number of the same texts for both courses, but his overlapping books included *Moby Dick*, *The Sound and the Fury*, *The Scarlet Letter*, *Grapes of Wrath*, and *Huck Finn*. These divergent curricular choices presuppose different levels of student ability and motivation, as Steven's overlapping titles are considerably easier to read than are Lance's.

To some extent, the teachers' differing expectations of students reflected their different teaching contexts. Megan and Steven both taught in public schools with a wide range of students, and neither taught students in the highest track. In contrast, Vanessa, Kate, and Jake all taught at small independent schools with a narrower range of student ability. One way to look at this data, then, is to look at the fit between the teachers' expectations and the students with whom they work.

Another explanation for the differences in the teachers' expectations, however, concerns the teachers' preparation for teaching. While working at the same school, Jake and Vanessa seemed to hold different knowledge about and expectations of their students. Although Jake commented over and over again about his surprise at what the students did not know, Vanessa never mentioned surprise or dismay at the students' knowledge, or lack of it. While Vanessa began with the assumption that teachers need to make literature accessible to students, Jake assumed that students would find the literature as interesting as he did. While Vanessa did not comment on the relative ability of her students, Jake suggested that his students' lack of intellectual ability made it even more difficult for him to understand their problems.

Due to their prior experiences, motivations for teaching, and professional preparation, Vanessa, Steven, and Megan



seemed better able to cope with a wider range of students. In fact, these teachers planned instruction specifically for students who are unmotivated; implicit in much of their planning is the need to motivate students to read and write. This awareness of the needs of less able students was addressed in their Curriculum and Instruction courses which emphasized the divergence of student ability and motivation. The analysis of the subject-specific courses suggests that the professor overcorrected for the tendency of prospective teachers to rely on their own experience to estimate student understanding by providing examples of student work exclusively from students who were at the lower end of both age and ability levels. The texts for these courses also emphasized the challenges of teaching unmotivated students. As the professor explained to the class, "At the more academic level, kids do what the teachers tell them. In the lower stream, it's more obvious that things aren't working" (Class observation, 7/7/86). Their experiences in these courses helped the graduates overcome their tendency to generalize from their own experiences and informed their expectations of students.

### Implications

This study poses a number of implications for policy, research, and practice regarding teacher education. On the theoretical level, this study contributes to the developing body of research on the knowledge base of teaching, particularly to the conceptualization and delineation of pedagogical content knowledge in English and to research concerning the sources of teachers' knowledge. This study also challenges the literature on the effects of teacher education coursework by demonstrating that subject-specific coursework can be a powerful influence on how teachers think about and teach their subjects.

All beginning secondary school teachers face the task of re-thinking their subject matter from a pedagogical perspective. In this case, the subject-specific courses in English helped Steven, Megan, and Vanessa make this transformation by providing frameworks for thinking about the teaching of writing and literature and strategies for putting these ideas into practice. These frameworks had a powerful effect on how the teachers conceptualized their responsibilities as English teachers and how they planned for instruction. The frameworks also shaped what the teachers learned from subsequent experience.

This study also poses implications for policies that waive professional coursework for prospective teachers. Without help, Lance, Jake, and Kate found it difficult to re-think their subject matter for teaching. Only Kate, whose initial conceptions of English focused on communication rather than literature and whose teaching context included the most homogenous and able group of students, developed a more pedagogical understanding of English. The disjunction between these teachers' implicit ideals of students and the realities of student ability and motivation is particularly problematic, especially as new teachers are unlikely to teach the advanced courses in which they might find the students they would most like to teach. Without help, teachers may learn to blame students for their lack of ability or motivation

rather than to re-think their assumptions about a teacher's responsibility to reach a wide range of students.

Clearly, this was neither a "typical" group of teachers, nor a "typical" teacher education program. The point of this analysis is not to generalize to all teachers with and without professional preparation. Case studies of specific teachers and particular programs, however, can help us build a richer conceptualization of the relationship between professional knowledge and professional preparation for teachers. As Shulman (1983) suggests, case studies can also contribute "images of the possible" (p. 495). The case studies of these beginning teachers and the courses that influenced their pedagogical content knowledge in English provide one image of the possible, a specific instance in which professional coursework did make a difference.

### Author Note

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### Reference Notes

<sup>1</sup>When one of the teachers resigned from his job before I could observe him teach, I added another interview that involved a retrospective account of a unit teachers had already taught.

<sup>2</sup>The atypicality of these teachers has theoretical advantages. The study remains true to Lee Cronbach's dictum that in comparing camels and horses, one should choose the best example of each; "We don't take two camels and saw the hump off one of them" (Cronbach, 1966, p. 85).

<sup>3</sup>The factors of self-selection into teacher education and teaching context are both potential sources of bias in this study. Teachers who choose to enter professional preparation may differ from teachers who choose to forego formal teacher education. The differing contexts may also have affected the development of the teachers' pedagogical content knowledge, particularly their curricular knowledge and knowledge of student understanding. My analysis addresses, in part, the role of teaching context; the problem of self-selection, however, remains.

<sup>4</sup>Just as interesting as what Steven, Megan, and Vanessa learned about student understanding is what they do not report learning. While Jake, Lance, and Kate all mentioned students' difficulty with grammar, the three graduates of a teacher education program that de-emphasized the importance of grammatical study never discussed this topic.

<sup>5</sup>Kate's teaching context helps explain why she was less troubled by the issues of student understanding. Her students represented an elite group and most closely resembled her own experiences as a student.

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