

Chapter 3: What Do Students Know? Facing Challenges of Distance, Context, and Desire in Trying to Hear Children¹

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No task is more fundamental to teaching than figuring out what students are learning. Paradoxically, no endeavour is more difficult. In his well-known sociological analysis of teachers and teaching, Lortie (1975) found that questions about the assessment of student learning evoked significant emotional response from teachers. Although the teachers whom he interviewed believed that good teachers inform their practice by closely monitoring students, many despaired of really knowing about the effects of their teaching. Lortie nominates this as one of the endemic uncertainties of teaching, observing that

... [a]ll craftsmen must adjust and readjust their actions in line with hoped-for outcomes; must monitor their steps and make corrections as they proceed ... Yet the monitoring of teaching effectiveness, defined as achieving instructional goals, is fraught with complications. (p. 135)

Lortie analyses these complications from two perspectives. Viewed externally, he argues that assessing outcomes is complicated by the lack of shared standards, lack of clarity about cause or influence, multiple criteria and lack of consensus, ambiguity about timing of assessment, and student changeability. Comparing teaching with other occupations, Lortie claims that these complications do not exist in more 'tangible fields' (p. 136). Indeed, he argues, such complications are inherent to the practice of teaching. Lortie also views the complications of assessment from the inside. Interestingly, he reports a bimodal distribution in teachers' feelings about assessing their effectiveness. Over half reported that it was problematic. Yet another third claimed that knowing whether one was doing a good job is relatively easy (p. 142). This divergence suggests that teachers live with the uncertainties differently.

However uncertain it may be, figuring out what students know is central to the everyday work of teachers.³ Teachers ask themselves many questions in the course of teaching: What should I do next? Is what I am doing working? Does this concept need to be reviewed? Are the girls feeling disconnected from this unit we are doing? What is that student saying? What is he thinking? Teachers are responsible for helping students learn. Minute to minute, day to day, and

week to week, teachers must constantly 'read' their students, making judgments about how things are going – in general and for particular individuals. They give tests, quizzes, and assignments. They ask questions, observe, listen. Yet what teachers watch, ask, and listen for varies. This variation may underlie differences in how unsettling teachers find the task of assessing what students are learning.

One way of coping with teaching's 'intangibility,' including the uncertainty embedded in assessing outcomes, is to use approaches that evade or mask such complications. One oft-heard shorthand confounds classroom activities with learning. Teachers report what students have 'had,' or what has 'been covered.' Still, most people know that a description of what has been taught is not equivalent to an examination of what has been learned. A consequent desire for accurate 'measures' of learning can be seen in the widespread efforts to make systematic a technology of monitoring students.

Standardized multiple-choice tests, weekly quizzes checked and recorded, progress charts, carefully convergent questioning – all are measures that check students in a manner that controls both variation and sources of ambiguity. Pimm (1987) describes a discourse pattern typical of many mathematics classrooms in which the teacher talks but leaves small openings for students to fill in key blanks:

- T: Supposing you started with that shape and you increased its length by two, what would have happened to the area. It would simply have ...
- P: Doubled.
- T: Doubled – but that's only moving in, increasing in one dimension – if you've got to increase the width by two as well – then you've got to double it again. So you would be doing – first of all, times two to double the length – and then times two again – to double the width again, so altogether you must have multiplied ...
- P: By four.
- T: By four, by two squared. (Pimm, 1987, p. 53)

In this exchange, the pupil does little more than play a part in the teacher's script. This typical pattern 'allows the teacher to maintain control of the discourse, while focusing attention on particular items along the way. It ... acts as a check for the teacher that the particular pupil questioned has grasped what is being explained' (Pimm, 1987, pp. 53-54).

Enacting such approaches, teachers can feel they know something about what students know. Still, what is being examined about students' learning is constrained – evidence often restricted to short, unprobed, and standardized answers (Cohen, 1995). Much is left unknown that teachers, parents, and the public care about – for instance, the ability to reason, to be imaginative, to construct

a convincing argument. And under the cover of simpler measures lie the tangled – sometimes wonderful, sometimes terrible – idiosyncrasies that are the products of children's sensemaking.

In a famous case study of a sixth grader named Benny, Erlwanger (1975) probed beneath the surface. Despite the fact that his teacher thought of him as advanced, the understandings lurking under Benny's consistently correct written work were wildly nonstandard. But in the individualized approach to teaching used in this classroom, it was possible for him to continue to progress officially, his personal constructions invisible to his unsuspecting teacher. Dramatic as this case is, it is likely not unusual. When all we ask students is to fill in answers in constrained spaces, we block our access to views of students' thinking.

A different way of coping with the ambiguities of assessment is to see it as ongoing, drawing on multiple and varied sources of evidence. To make the examination of learning more complex is to admit of its subtleties and requires broadening both the objects and methods of assessment. Students are presented with open-ended tasks that have no single constrained 'right answer' and which invite application, imagination, and extension. Such assessments seem more satisfyingly 'authentic,' to have more relevance to the enterprises for which teachers strive to prepare their students (Darling-Hammond, Ancess, & Falk, 1995). At the same time, the open-endedness increases the uncertainty of interpreting and appraising student progress and makes it more difficult to share common standards across students, groups, and settings (Cohen, 1995). Moreover, the context of the task, necessarily constructed by each individual student, make it that much more complex to ascertain what students know. How is the context affecting the student's response in ways that are idiosyncratic to the particulars of the situation? Issues like these challenge core epistemological and psychological assumptions about what it means to 'know' something. Although some researchers claim that students who engage in close reasoning about performance-oriented problems have deep 'insights into the structure of the subject matter' (Hiebert et al. 1996, p. 17), others express reservations about the assessment of abstract ideas which are usable across settings (Anderson, Reder, & Simon, 1996, p. 9). Cohen (1995, p. 9) synthesizes the issues:

[W]e have little evidence about how well the newer assessments represent students' 'understanding' of mathematics or reading, in part because this assessment technology is very young. It seems reasonable to think that performance assessments could do a better job than norm-referenced standardized tests, but researchers are only now turning their attention to what understanding might be, how it might be assessed, and what satisfactory assessment of understanding might be.

Despite these uncertainties, enthusiasm is high for focusing on what students *understand* and *can do* through ongoing and performance assessment (Darling-Hammond et al., 1995). Widely eschewed among reform advocates are the traditional measures that constrain the problems of ‘measuring’ what students know. But this current press for ‘authentic assessment’ moves central ambiguities of practice to the public stage of school accountability. The new assessments reveal the uncertainties of interpreting what students know and have learned and yet situate such tenuous information in the political context of schooling.

In this chapter, I return to and extend Lortie’s (1975) examination of the sources of endemic uncertainty resident in assessment. Writing from the perspective of practice,⁴ I investigate challenges inherent in the central task of figuring out what students are thinking and learning. I explore the problem from three angles:

- Teacher knowledge: First, I review briefly recent work on teacher knowledge. What have researchers identified as key elements of teaching knowledge and how do these play a role in hearing and assessing students’ thinking and learning? What kind of knowing *is* knowing students, and how well do we as teachers, researchers, teacher educators, and parents understand the nature of what we know (or think we know) about students?
- Challenges embedded in practice: Second, I analyse conceptually what makes the task of assessment so difficult in practice. From the perspective of the teacher, what persistent challenges influence efforts to figure out what students are learning?
- Learning to know about students: In the final section of the chapter, I turn to an examination of what is involved in preparing teachers to hear their students. What do teachers need in order to be prepared to figure out what students know, and what are some ways in which they can develop and enhance such capability?

TEACHER KNOWLEDGE: BEING BOTH RESPONSIBLE TO SUBJECT MATTER AND RESPONSIVE TO STUDENTS

I begin with a brief look at recent developments in research on teaching and teacher thinking where issues of what teachers need to know have occupied center stage. In particular, over the past decade the role of subject matter knowledge has claimed considerable attention among researchers and teacher educators. In a seminal presidential address to the American Educational Research Association, Lee Shulman (1986) referred to subject matter understanding as

'the missing paradigm' in research on teaching and teacher education. With a sweep of convincing argument, he attracted renewed interest in the nature and role of teachers' subject matter knowledge⁵ – and in a new kind of knowledge, *pedagogical content knowledge*. Not only do teachers need personal understanding of the material they were teaching, Shulman and his colleagues argued, but they also need to know ways in which key ideas might be compellingly, engagingly, and helpfully represented. Teachers need a repertoire of metaphors and analogies, problems and tasks, pictures and diagrams. They need to be aware of topics with which students often had difficulty, and of common misunderstandings (Shulman, 1986; Wilson, Shulman, & Richert, 1987). In short, they need ways to see into the subject matter through the eyes, hearts, and minds of learners. And their task is to 'transform' the content in ways that make it accessible to students (Wilson et al., 1987) while maintaining its integrity (Ball, 1993b; Bruner, 1960; Lampert, 1992).

Responsibility to the subject matter is only one part of the equation. In making subject matter 'accessible,' teachers also need to know students. Teachers need understandings of students in general – patterns common to particular ages, culture, social class, geography, and gender; patterns in typical student conceptions of the subject matter. But, more to the point, teachers must know *their* students (Peterson, Carpenter, & Fennema, 1989). Face to face with actual children who are particular ages and gender, culture and class, teachers must see individuals against the backdrop of sociological and psychological generalizations about groups. Often to simplify the enormous complexity of teaching, teachers may presume a 'shared identity,' mistakenly assuming that students share their teachers' experiences of school and of the world (Jackson, 1986). Teachers are themselves particulars in the social tapestry and different from their students. They are separated at least by generation and in multiple other ways as well. For example, women teachers will teach boys and middle class teachers poor children, while non-religious teachers teach devout Christians (Delpit, 1988; Paley, 1995). Yet teachers must build bridges across the chasms of difference. In order to make the subject matter accessible to students, the more they know about student experiences, backgrounds, understandings, and interests, the better equipped they will be, so the argument goes.

Much of the recent work on pedagogical content knowledge has advanced our understandings of what teachers need to know about students to inform 'the ways of representing and formulating the subject that make it comprehensible to others' (Shulman, 1986, p. 9). In 'transforming' the content for instruction, teachers examine critically the topic or text at hand and select a way of representing it, adapting particular representation in light of what they know in general about students (Wilson et al., 1987). Wilson and her colleagues describe the interplay between the teacher's understanding of the specific content and of the

Chapter 4: Teaching for Understanding¹

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This chapter examines current views of teaching for understanding. First we provide background information, describing the influence of both theory and research on changes in approaches that have led to the recent stress on students as active constructors of their understanding. Then we summarize and compare a variety of programs that incorporate elements of construction and review issues that merit further investigation. Finally, we consider problems entailed in dissemination, especially difficulties teachers might encounter and describe promising attempts to foster their ability to teach for understanding.

WHAT IS TEACHING FOR UNDERSTANDING?

Over the last twenty years, approaches to teaching for understanding have evolved from models which stress information transmission to ones which emphasize student transformation of knowledge. The progression has been from emphasis on teacher directed, well structured, organized delivery of information to emphasis on the role of the individual learner in constructing understanding and the influence of the social environment on that construction. Below we present theoretical and empirical bases for different approaches to teaching, describe educational applications of these approaches, and indicate limitations derived from research and practice that have contributed to the current approaches to teaching for understanding.

Transmission Models

Early approaches.

Several approaches to teaching through the 1960s and 1970s were based on a transmission model of teaching and learning. The view was of a teacher as authority who disseminates knowledge largely through lectures and verbal exchanges; knowledge is an entity that exists and can be transferred to students;

learning is based on the accretion and retention of presented information and skills.

Behaviorism was one of the major theories contributing to this approach. Behavioral learning theory, focusing on behavior rather than mental operations, identified concepts like discrimination learning, generalization gradients, stimulus control, and fading as the operating mechanisms that controlled learning. Early instructional approaches based on behaviorism emphasized the need to structure curricula carefully so that prerequisite behaviors were shaped prior to students attempting to learn newer behaviors. As a result, it was critical that teachers carefully build up behavior through shaping responses, assuring that students gain mastery over early material before attempting to learn more advanced material. The underlying assumptions were that learning is hierarchical; it involves the aggregation of simple behaviors into more advanced behavior complexes and that high rates of success, shaped by positive reinforcement, are necessary for learning.

One of the most widely disseminated programs with comprehensive research bases was DISTAR (Engelmann & Brunner, 1984). DISTAR is an instructional program based on Bereiter and Engelmann's (1966) attempt to develop a structured reading program to overcome the presumed educational disadvantage that some children have, particularly those coming from what was called 'culturally deprived' backgrounds. The program was designed to lead children through highly structured, compressed language experiences to overcome their linguistic disadvantage.

Early applications of computer technologies for schools also were based on behavioral notions. One of the most thorough of these programs was developed by Suppes and Atkinson (Suppes, 1966), later to become the Computer Curriculum Corporation's drill-and-practice materials. This early work, which is still in very wide use, is based on a model of technology application called computer assisted instruction (CAI). The major strength of CAI to support drill-and-practice is in the ability of software applications to present material, collect achievement data on-line, and then select an appropriate subsequent item based on the student's individual learning history. In this way, CAI can embody many of the central attributes of direct instruction (e.g., carefully sequenced material, guided practice, immediate and specific feedback).

Research on learning and instruction also was influential in contributing to transmission models of instruction. Gagné (1985) emphasized task analysis where components of final performance were identified and sequenced. Teaching involved hierarchical task analysis of the desired performance via specification of prerequisite knowledge and skills. Understanding involved mastery of lower levels of the task-like skills, before moving on to higher levels like learning principles. Transfer was presumed to be enhanced when tasks had common prerequisites and component elements.

From the realm of practice, a spate of studies conducted in classrooms focused on teacher behavior and its relationship to student achievement. From the work of Heokter and Ahlbrand (1969) and the pioneering linguistic analysis of classrooms by Bellack, Kliebard, Hyman, and Smith (1966), researchers showed that a small number of common elements could be identified with classroom teaching. This research was conceptualized around four behavior complexes – structuring, soliciting, responding, and reacting – that could be found in classrooms in many different countries. These four complexes could be used to subsume a large number of teacher behaviors thought to be associated with effective instruction, that is, instruction that fostered understanding.

Ausubel (1960) proposed a much more cognitive model of learning and memory with implications for structuring information via advance organizers. These ideas went beyond previous notions of learning as accrual of facts and skills. The importance of teachers' organizing information for learners is also reflected in Rosenshine and Furst's (1973) model of explicit instruction. The model identified six behaviors associated with student achievement. One was review during which teachers were to check homework, review material, and determine where students were having difficulty. Second was presentation. Here teachers were to orient students to the material to be covered, often using instructional manoeuvres such as advance organizers (Ausubel, 1960) and stating the objectives for the lesson (Mager, 1975). Lesson presentations were structured and teacher controlled with characteristics similar to recitation (i.e., structure, solicit, respond, and react). Third was guided practice, keeping students active and on task, which provided opportunities for students to demonstrate understanding. Here teachers were to ask many questions and evaluate student responses to check for understanding. Fourth was providing feedback during guided practice. The feedback was highly descriptive, precise, and task focused, referring to correct and incorrect features of the response. Fifth was engaging students in independent practice, so that students would overlearn the material, responses would be quick and automatic, and attain a high correct response percentage. Finally, teachers were to conduct a review at the end of the lesson in order to consolidate learning and help students with recall and retrieval from memory.

Process-product research.

A large and influential body of work, labelled process-product research, stemmed from a model developed by Dunkin and Biddle (1974). This model offered a classification for factors involved in research on teaching: presage variables (teacher characteristics), context variables (pupil, school, and community properties), process variables (actual activities of classroom teaching), and

product variables (the outcomes of teaching, including what students learn). One type of knowledge this model suggests concerns process-product relations between observable classroom events and student learning. In practice, most process-product studies compared observations of teacher behaviors, usually expressed in terms of frequencies, with standardized measures of student achievement. This tradition was advanced through the work of Gage and his colleagues (Clark, Gage, Marx, Peterson, Stayrook, & Winne, 1979; Gage, 1978), Berliner and the well-known Beginning Teacher Evaluation Study that examined how teachers use time (Berliner, 1979; Denham & Lieberman, 1980), Rosenshine and his colleagues (Rosenshine, 1986; Rosenshine & Stevens, 1986) who advanced what they called the functions of teaching, Brophy and Good (1986), who examined teacher behavior and student achievement, and Hunter (1982) who promoted inservice training approaches. Although similar in focusing on process-product relations, these investigations differed in their educational theory and in their view of psychological principles of learning.

An influential series of process-product studies used achievement test scores to describe differences in behaviors of teachers who consistently produced better student learning. Moreover, experimental studies based on these results produced achievement gains in students. Brophy and Good (1986) summarized some of the main findings of this approach. Teacher behaviors correlated with student achievement included providing opportunities to learn in terms of quantity and pacing of instruction, managing to maximize students' engaged time and actively teaching rather than leaving students to learn on their own. Such active teaching involved examination of how teachers delivered information in terms of structuring, sequencing, clarity, and enthusiasm. It also entailed frequent questioning of students to check for understanding, providing feedback about correctness, and helping those who answered incorrectly to reach the right answer by rephrasing, prompting and giving clues.

Missouri Math was one example of the process-product approach. Good, Grouws, and Ebmeier (1983) identified patterns that characterized teachers whose students differed on achievement test scores. They developed an instructional program based on the principles of active teaching identified in the process-product research. Teachers are instructed to provide clear illustrations of mathematics concepts and to use demonstrations, concrete examples and illustrations, models and diagrams, and manipulatives. Lessons:

- a) begin with an *opening* which briefly reviews material previously learned and reviews homework;
- b) move to a *development* phase, in which teachers focus on prerequisites and then develop meaning through illustrations, examples and highlighting relationships among ideas, emphasize application, assess student comprehension frequently, and repeat and elaborate as needed;

- c) proceed to seatwork to provide uninterrupted successful practice (trying to have students achieve 80 per cent correct responses);
- d) usually conclude with assigning homework to take about 15 minutes.

Additionally, the teacher should present weekly and monthly reviews. It is interesting to note that while the approach focuses on the teacher as transmitter of information, aspects of the recommended development phase foreshadow more recent approaches to teaching for understanding that stress meaning-making as the basis for understanding.

Limitations.

The central goal of the rapidly growing research program in transmission models of instruction and related areas through the 1960s and 1970s was to improve teaching and schooling through the development of a scientific basis for teaching. This overarching goal implies that both theoretical and practical criteria need to be attained to judge the success of the research effort. Criticisms of the research at the time focused on both types of criteria, and researchers raised several concerns which eventually led to the emergence of an alternative framework.

One limitation of the research was that it relied on standardized tests as measures of learning; typically such tests tap what has been called inert rather than usable knowledge. That is, they assess isolated knowledge and skills rather than the ability to use knowledge both in and out of school situations. Critics also argued that direct instruction seemed most effective in teaching factual content to low ability students (Peterson & Walberg, 1979) but that it was less successful for promoting problem solving or 'higher level' thinking. A second limitation was that while it was successful in distinguishing effective from ineffective teachers, it was less successful in characterizing exemplary instructors. A third related limitation was that it did not sufficiently address subject matter differences. A fourth was that it was not sensitive to the effect of context.

Most importantly, several researchers (e.g., Doyle, 1977; Winne & Marx, 1978) argued that transmission models could not adequately identify mechanisms that accounted for student learning. By the end of the 1970s, theoretical and empirical work on learning had begun to move from primarily behavioral accounts to more cognitive frameworks. Theoretical objections to transmission models were derived from these newer, cognitive learning theories. For example, Winne and Marx (1978) argued that most, if not all, studies in the process-product tradition used mental constructs (e.g., 'remembering,' 'understanding,' 'analyzing') as the presumed mechanisms to account for how a teaching process (say for example, the teacher's use of higher order questions, or of wait time)

Chapter 5: Peer Cultures and Their Challenge for Teaching

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In recent years, the term *peer group* has increasingly been replaced by the term *peer culture*. This chapter begins with a discussion of these two terms and the likely reasons for this change. Next, a typology of peer cultures is presented based on three different ways in which these culture can be created. The presentation of this typology is followed by a discussion of the diversity among peer cultures generated by background characteristics of peers such as social class, gender, age, and race-ethnicity. The chapter then assesses the claims that peer cultures of children and adolescents frequently conflict with teachers' goals and the official school culture that encompasses these goals. While not rejecting these claims, I argue that they are based on simplifying assumptions that ignore tensions and contradictions within official school cultures. In particular, I argue that it is useful to separate three strands of official school culture – academic goals, extracurricular activities, and school rules about deportment – and to show how each affects and is affected by the peer cultures students construct for themselves. Next, the influence of peer cultures on students' opinions and behaviours is assessed directly in a section of the chapter that reviews the literature concerned with the nature and strength of peer influence. The final section of the chapter assesses the implications of peer cultures for teaching by examining what school staffs have done and might do to affect peer group processes at different levels of schooling.

PEER GROUPS AND PEER CULTURES

The term *peers* is generally used to refer to persons who occupy equivalent positions in an organization or social network. These positions are usually designated by identity labels, and those with legitimate claims to the same label are said to be peers. Thus, students in a school are peers, as are teachers in a school, but students and teachers hold different positions and are not peers. Students in different schools may also be regarded as peers, especially when the students are at the same grade level. Students may also be regarded as the peers of those who drop out of school, but in such cases, a label other than student (e.g., adolescents, gang members, 16 year olds) will be used to identify the basis of their

peer status. Although teachers or principals or school bus drivers or academics who judge one another's scholarship meet the definition of peers just as much as students do, the term is used in this chapter to refer to young people, especially children and adolescents.

Peer groups consist of two or more peers who are linked together by more than their common identity label. These linkages usually include contact, interaction, and positive, sociometric choices (who are your friends? whom do you like?). Peer groups vary in size and in closeness. Closeness is difficult to define precisely because it is based on multiple linkages, but increases in number of contacts, duration and variety of interactions, and reciprocated sociometric choices should all produce increased closeness in peer groups. Network theorists (Boissevain, 1974; Fischer, 1982) have also stressed the importance of density by which they mean the extent to which the members of a group are interconnected. The more of a person's friends who are friends of one another, the more dense his or her friendship network. Similarly, the higher the proportion of peers who identify themselves and one another as members of the same group, the more dense that group. Dense peer groups are likely to be perceived as not only closer but also more exclusive than peer groups that are less dense.

Peer groups may be important to their members even when the groups are not dense or particularly close (Granovetter, 1973). Peer groups may also serve as reference groups for people who do not belong to them. In such cases, people may identify with a group, seek to emulate it, and wish to join it, but they may have little, if any, contact and interaction with group members. Nor would such people be the target of positive, sociometric choices by group members. Indeed, group members may not even be aware of the people who use them as a reference group. This lack of awareness might be interpreted by others as snobbishness, and this interpretation might produce a 'cycle of popularity' like the one described by Eder (1985) in which a popular peer group is transformed from a positive reference group to the most disliked group in the school.

The behaviours of peer group members are interpreted not only by outsiders, but also by the members themselves. These interpretations give rise to a *peer culture* which consists of the descriptive and evaluative meanings that peer groups assign to behaviours and relationships. These meanings are never static, and the interactions among peer group members consist of talk and behaviours that construct, maintain, consolidate, challenge, or change these meanings. The interpretations peer groups construct for themselves and their own experiences are usually part of a broader process in which meanings are also assigned to other groups and individuals. This seems to be particularly true in school settings where peer groups often construct their identities in contrast to those of 'outsiders.' A classic example of this process is provided by 'the lads,' the group of rebellious, English, working class students studied by Willis (1977), whose conversations make abundantly clear that they define themselves and their ex-

periences in opposition to attitudes and behaviours attributed to the conformist students they call 'the ear'oles.' The lads also construct their own efficacy and superiority through processes of interaction in which limited, sexualized identities are assigned to girls, and ethnic minorities are treated as 'smelly' interlopers.

Although peer cultures are constructed in interactions among peer group members, the descriptive and evaluative meanings that constitute these cultures do not necessarily originate in the peer group. It is more likely that the peer group will construct their meanings out of the beliefs, norms, preferences, and values they have learned at home, from the mass media, from teachers, and from the many other persons and groups to whose ideas they have been exposed. For example, Willis's analysis of racism in the English secondary school 'the lads' attended leads him to conclude that '(b)oth the lads and (teaching) staff do share, therefore, a sense in their different ways of resentment for the disconcerting intruder' (Willis, 1977, p. 49). What sets the lads and the teachers apart is not the core set of beliefs and feelings they direct toward minority groups, but the ways in which they express those beliefs and feelings. Unlike the teachers, the lads frequently use verbal violence, and sometimes use physical violence, to show their rejection of 'the wogs' and 'bastard Pakis.'

As this example suggests, what differentiates peer cultures from one another is not so much their unique beliefs, preferences, norms, or values, but the meanings and emphases given to these cultural elements in the behaviours of the peer group. It is also common for the same behaviours to be given different meanings in different peer cultures. A good example is alcohol use among adolescents. Several researchers (e.g., Everhart, 1983; Gordon, 1957; Hartup, 1983, p. 146; Wooden, 1995) have found that student athletes in junior and senior high schools in the United States frequently use and abuse alcohol and sometimes use illegal drugs as well. Despite their behaviours, these students tend to be defined by themselves and others as 'jocks,' 'the athletic crowd,' or 'sporties,' names that emphasize their interests and participation in sports and mask their substance abuse. In contrast to these peer cultures are those in which the core identity of both the group and its members is constructed around alcohol and drug abuse. Known around school as 'a group ... whose thing it is to go out and get drunk' (Cusick, 1973, p. 70), they tend to be called by such names as 'drug-gies' or 'burnouts.' Despite the sharp difference in nomenclature between these two peer cultures, it seems entirely possible that some of the 'burnouts' may actually engage in less substance abuse than some of the 'jocks.' What sets these peer cultures apart is the complex set of interpretations that surround specific behaviours. To jocks, drinking lots of beer may just be something everyone in their crowd does on week-ends, but to burnouts the same behaviour may signify maturity, or financial independence, or risk-taking, or rebellion against adult authority.

As this contrast between jocks and burnouts indicates, the term culture draws attention to the particular views that people develop about themselves, their behaviours, and the world around them. To analyze a culture it is necessary to ask not only what people are saying and doing, but what those activities mean to them. This concern with the ways in which people construct meaningful lives for themselves has a long history in social and behavioural sciences, and those who study children and adolescents have long been interested in the ways in which the beliefs, norms and values of these young people differ from, overlap, or are influenced by those of their teachers, parents, and other adults. Given these concerns, it is not surprising that the term peer culture has been a useful tool.

One reason this has become increasingly true is because the term group no longer seems to carry a strong cultural connotation. Of the eight definitions of this term with which Forsyth (1990) begins his text in group dynamics, only two incorporate cultural elements (e.g., 'a set of values and norms'). The rest of the definitions, all by famous group theorists, ignore culture in favour of an emphasis on interaction or interrelationships. Thus, the term group draws our attention to the ways in which people are linked to one another, but does not compel a search for the meanings and significance of those links. Perhaps this tendency to divorce group from culture reflects the laboratory-based, small-groups research tradition in which strangers whose beliefs or behaviours have been manipulated by experimenters are given little chance or encouragement to develop a group culture of their own.

The increased use of the term peer culture probably reflects not only the reduced utility of the group concept but also the popularity of two related terms, namely, subculture and youth culture. The former term is embedded in a long tradition of research and theory concerned with deviance and delinquency. The specific subcultures that have been studied range from gangs of youthful criminals in the United States (Cohen, 1955; Monti, 1994) to aggregates of young people in Britain, such as Punks or Skinheads, whose identities are based on such elements of style as appearance, demeanour, and argot (Brake, 1985; Hebdige, 1979). The term subculture draws attention to both the acceptance of some values from the dominant culture and to the development of oppositional norms and rebellious behaviours. Brake (1985, p. 8) suggests that the latter reflect the subordinate status of those who participate in the subculture:

... subcultures (are) meaning systems, modes of expressions or life styles developed by groups in subordinate structural positions in response to dominant meaning systems ... (A)n essential aspect of (a subculture's) existence is that it forms a constellation of behaviour, action, and values which have meaningful symbolism for the actors involved.

The parallels between this definition of subculture and the definition of peer culture presented earlier are obvious, and it is certainly the case that children and adolescents hold subordinate structural positions. Nevertheless, the term *subculture* is rarely, if ever, used in the literature concerned with peers in schools. Perhaps, the term is too closely linked to extremely deviant behaviours to be considered a useful tool for analyses of most student behaviours in most school contexts. The term peer culture may be a better conceptual tool for calling attention to the possibility that peer groups may evolve interpretations and meaning systems that foster (some of) the official goals of the school. Whereas the term peer *subculture* implies rebellion, the term peer culture leaves open the possibilities of compliance as well as resistance.

Unlike the term subculture, the term youth culture owes its existence and popularity as much to the mass media as to scholarly endeavours. It was most popular in the period from 1964 to about 1975 when it was thought that young people, particularly in Western countries, were developing a counter-cultural life style that both rejected and threatened the dominant culture. Cultural elements such as beliefs, preference, norms, and values were at the heart of the debates about the significance of the youth culture, and the established authorities felt strongly that they were battling against the youth culture to retain control of the hearts and minds of their constituents. In addition, the discussions of the youth culture called attention to the powerful effects of the mass media and of consumer goods aimed at the 'youth market.' Although some argued that media messages and consumer goods had simple, direct effects on the behaviours of youth, most recognized that youth often made unexpected uses and interpretations of what their society offered. Much was made of the fact that some clothing styles that originated in youth groups later came to be commercially produced and internationally marketed. Thus, youth were seen to be developing not only their own symbolic culture, but their own material culture as well.

Whereas the term subculture often references the culture of specific groups with specific identities, the term youth culture was loosely applied. Age seemed to be the major criterion for eligibility, and the slogan 'don't trust anyone over thirty' seemed to establish the upper limit. Following Keniston (1970), some argued that the youngest members of the youth culture should be older adolescents of high school age, a suggestion that makes the term unusable for students in junior high schools or below. Regardless of age limits, no one assumed that every member of the youth culture knew or had interacted with every other member, a fact that made it extremely unlikely that anyone would talk or write about 'the youth group.' Nevertheless, specific youth groups and networks often overlapped, and ritual gatherings, such as rock concerts or anti-war protests, provided opportunities for members of the youth culture from different regions and countries to affirm their cultural identity and to influence one another. As we shall see in the following section of this chapter, all of these characteristics

Chapter 1: The Changing World of Teachers

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What can one possibly learn that is new about teachers and teaching? Surely, nearly everyone has sat as a student in classrooms, thus most of us have had at least some personal contact with teaching and the professional conduct of at least a few teachers. And for this reason, teachers and teaching may not seem as mysterious to us as the lives and activities of surgeons, psychiatrists, nuclear physicists, or other professionals whom we have never observed.

And yet, how much do we really know about teachers and teaching? On the one hand, teachers constitute by far the largest population of professionals in industrialized nations – numbering more than three million persons in the United States alone – and therefore we have personally encountered only a minute portion of the many different working conditions, challenges, coping strategies, triumphs, problems, and failures of such a huge assembly. And on the other, teachers work within complex, rapidly evolving, people-processing institutions whose features are not always obvious and live lives that extend far beyond their classrooms in space and time. Thus, to gain better insight into teachers and teaching, we must look far beyond our personal experiences.

Moreover, it is important that we gain this knowledge. Most schools and school systems are also open institutions that are supported by taxes. Thus, their goals and policies are subject to parental concerns, public scrutiny, and political debate, and educators often find that they must cope with policy proposals for ‘improving’ schools that are based on absurd assumptions and profound misunderstandings about teachers and teaching. It is vital, therefore, that we learn as much as possible about teaching and how the lives of teachers are conducted – as well as how both might be improved – and make this knowledge part of ongoing debates about the conduct of schooling.

Let us look, therefore, at traditional sources of knowledge about teachers and their work, and at the new contributions to knowledge about teachers which appear in this *Handbook*.

CLASSIC VIEWS

Classic writings about teachers have generally stressed two themes. Some authors have tended to portray teachers in their official capacities—as employees of formal organizations comprised of social positions that are assigned explicitly stated and agreed-upon rights and responsibilities (see, for example, Ballantine, 1989, chapter 6; Bidwell, 1965; or Katz, 1964). In this view, public schools and the systems that embed them are set up by superordinate political entities (‘the state’ in most industrialized countries, ‘the community’ in America). Such institutions are charged with instructing young persons and with providing other, associated services that complement instruction, and they are staffed by persons with explicit titles: school board member, superintendent, curriculum specialist, budgetary officer, principal, school nurse, janitor, and the like.

But it is the *teachers* who do most of the real ‘work’ of the school, who bear primary responsibility for instructing the students who constitute the clients of education. And to structure their activities, teachers are given facilities (such as textbooks and a classroom) and are assigned explicit tasks, ranging from responsibilities for reaching curricular and non-curricular goals, to duties associated with maintaining order, protecting the school environment, meetings with parents, leading extra-curricular events, attending outreach activities in the community, and the like.

This first portrayal of teachers tends to undergird a good deal of today’s political rhetoric about what might be wrong with education and how to reform it, for it presumes that teachers, like ‘workers’ in other types of formal organizations, are motivated either by their assigned responsibilities and salaries or by their loyalties to the entity that employs them. Thus, it largely ignores such issues as the unique, moral character of education, the professional training and concerns of teachers, and the actual, interactive processes involved in instruction.

In contrast, a second, classic view of teachers has stressed the realities that are faced by teachers who must contend with what actually transpires in classrooms, schools, and school systems (see, for example, Bennett & LeCompte, 1990, chapter 4; Dougherty & Floyd, 1990, section 4; Lortie, 1975; Sizer, 1985; or Waller, 1932). The latter portrayals focus on dilemmas that are created for teachers by limited budgets, unbending curricula, public disputes about education, diffuse goals for schools, unruly students, and the fact that teachers normally have low status in the bureaucratic organization of the school system.

Central to this second, classic view is the idea that such realities not only pose problems for those who choose teaching careers but also that they inhibit accomplishment of the instructional tasks assigned to teachers (see Bryk & Driscoll, 1988; Coleman, 1961; Oakes, 1990). To illustrate, a number of studies have appeared showing how the practice of ability tracking, now widespread in

American schools, debases the effects of teaching for many minority students (Hallinan, 1996; Oakes, 1985). Thus, this view honors the idealistic motivations of teachers and accepts as largely legitimate the traditional tasks taken on by the school, but suggests that the realities of school and classroom life may, instead, pose many problems for teachers and govern what they are actually able to accomplish.

One stress within this view has concerned problems standing in the way of teachers' attaining a true professional status such as that enjoyed by doctors, lawyers, and religious leaders. Persons in these latter professions typically provide services to others, are self-employed, hold advanced academic degrees, set and police requirements for their fields, are presumed to possess 'expert' knowledge, and are thought to be motivated by deep, moral commitments. Teachers typically do not meet all of these qualifications, hence teaching has sometimes been thought of as a 'semi-profession' (Etzioni, 1969). But most teachers are also women, and the other 'semi-professions' identified by Etzioni are also largely staffed by women, so serious objections have been raised to this characterization. Be that as it may, powerful voices have also been raised recently urging greater professionalization for teachers (e.g., the Carnegie Forum on Education and the Economy, 1986; or the Holmes Group, 1986).

OTHER VISIONS

Although these classic views have dominated many writings on teachers to date, other ways of thinking about teachers have also surfaced recurrently which provide alternative visions of teachers and teaching.

One such vision questions the traditional tasks of schooling. As suggested above, classic portrayals have, in effect, assumed that the efforts and accomplishments of education are largely focused on the tasks for which those schools were presumably established. In contrast, a contrarian literature has appeared that challenges this assumption (for illustrations, see Bowles & Gintis, 1976; Wexler, 1992). This literature makes use of neo-Marxist insights and suggests that, whether they realize it or not, schools are often responsible for reproducing social class differences. They do this by encouraging students from working- and lower-class homes to entertain only modest aspirations and to train for laboring jobs, whereas the sons and daughters of affluent parents are encouraged to aspire to and achieve professional careers and positions associated with wealth and power. This literature often blames teachers for such outcomes, although a few authors (e.g., Willis, 1977) have also suggested that students, too, have 'agency' and are partly responsible for their willing acceptance of social class differentiation.

Another scholarly vision has focused on role expectations that are held for teachers (see Biddle, Rosencranz, & Rankin, 1961; or Kelsall & Kelsall, 1969). Works representing this vision note that teachers are affected, not only by the rights and responsibilities imposed on them because they are employed in schools, but also by the expectations that they and important others hold for teachers and teaching. Thus, teachers may be influenced, not only by what the ‘rules and regulations’ say, but also by what the principal of their school, curriculum specialists, parents, school board members, or ‘experts’ think, as well as by their own opinions. Within this vision, the professional worth of teachers is thought to be affected by various sources of influence, and teachers are portrayed as thoughtful actors whose actions in the classroom and school reflect rational choices among alternatives urged by others who are important in the educational scene.

A more recent research tradition has focused on investigations of the professional careers and lives of teachers (Goodson, 1981; Goodson & Hargreaves, 1996). Only a very few studies had appeared concerned with teachers’ lives and careers prior to the 1980s. However, a good deal of effort has recently been focused on these topics. Studies within this effort have represented various research methods ranging from autobiographical narratives written by teachers, to professional biographies, life histories, or case histories composed by others, sometimes in collaboration with teachers, to qualitatively based studies of teachers as they struggle to cope with specific schools and educational contexts. This effort has reflected several motivations on the part of investigators, among them desires to find ways to express and encourage the professional autonomy of teachers, to engage more fully the moral and social purposes of education, to encourage self-directed learning among teachers, to recognize and honor the complex tasks of teaching, and to help defend public education from recent attacks by conservative ideologues.

Yet another tradition has reflected the massive outpouring of observationally based research on classroom teaching that has surfaced during the past three decades (Anderson, 1995; Dunkin & Biddle, 1974; Good, 1996; Good & Brophy, 1997). As various authors have noted, few researchers had thought to look at the actual events of classrooms prior to the early 1960s, but subsequent years have certainly reversed this picture. As a result, a great deal of evidence has now been collected about teacher behavior in classrooms – about teacher initiation, lecturing styles, responsiveness, differential treatment of students, language use, questioning techniques, strategies for controlling and disciplining students, and a host of other issues concerning teacher classroom conduct – and about the forces that generate differences in teacher behaviors, and about how those behaviors, in turn, affect student conduct and learning. (Chapter 1 of the second volume of this *Handbook* provides a more detailed introduction to this tradition, and several chapters representing it appear in that volume.)

In addition, an enormous amount of research appears each year concerning the demographic characteristics of teachers and students, teacher salaries and other educational finance issues, some of the societal problems that afflict education, and the morale, plans, and achievements of teachers and students. In the United States, a good deal of such research is published by arms of the federal government such as the Bureau of the Census and the Office of Education, but other bits of it appear regularly from educational consortia, non-profit research organizations, foundations, teachers' organizations and unions, and from mass media sources. Similar government and non-government sources generate related information about teachers in other industrialized nations, and additional materials appear regularly from international sources such as UNESCO, the OECD, and the International Association for the Evaluation of Educational Achievement (IEA). Sources such as these provide invaluable information about the composition of the teacher corps, the supply of and demand for teachers, the conditions under which teachers work, measured student achievements, and other background details needed for better understanding of teachers and teaching.

Finally, the past two decades have witnessed a substantial flowering of conservative political thought, and this has provoked various attempts to restructure or reduce the scope of public education in Western nations. Many of these attempts have, in effect, scapegoated teachers or attempted to control teachers' activities through 'reform' efforts featuring top-down managerial strategies, and this has provoked consternation, disruption, and loss of morale among teachers and other educators. A literature commenting on such events has begun to appear (see, for example, Aronowitz & Giroux, 1985; or Berliner & Biddle, 1995), and this too has formed part of the scholarly background for this *Handbook*.

NEW ISSUES AND CONTRIBUTIONS

The substantive chapters of this volume not only provide useful reviews of recent research but also make new contributions that transcend those of prior works on teachers. Let us highlight some of these contributions.

Several chapters in the volume break new ground by focusing on the *sequences* of events in the lives and careers of teachers. In chapter 2, Michael Huberman, Charles Thompson, and Steven Weiland review recent research on the professional lives and careers of teachers. After discussing epistemological issues raised by the several different traditions of research on this topic, they propose models for the stages of teachers' careers, the different paths teachers may take, and the educational and personal implications of those different paths. Chapter 3, by Robert Bullough, examines research on 'becoming a teacher,' dis-

Chapter 2: Perspectives on the Teaching Career

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INTRODUCTION

When one of the authors (MH) was beginning his career in Geneva in the early 1970s, he had the privilege of working with the celebrated psychologist Jean Piaget on a study of the human life cycle. 'Tell you what,' Piaget said, 'I'll take the period from neonatal development to 14 years, and you take the rest. But don't be disappointed. There won't be much going on after 14.'

Until recently, one might have reached a similar conclusion about our topic, teachers' professional lives. If we consult, for example, the *Third Handbook of Research on Teaching* (Wittrock, 1986), there is no mention of life cycle or even career-relevant issues beyond pre-service education and its immediate consequences. With a handful of notable exceptions, teachers' professional lives had not been the subject of much social scientific study until the early 1980s. Nearly all inquiry stopped roughly three years after career entry. One might have concluded, like Piaget, that there was not much going on.

By contrast, to consult the more recent handbooks, publication series, monographs, and research journals is to witness an explosion of interest in the teaching career from virtually every epistemological and methodological quarter. Why the explosion of interest? Why now? One reason appears to be the growing recognition that teachers' commitment, energy, knowledge, and skill may be the central determinants of schools' effectiveness. In a discussion of teachers' career satisfaction, McLaughlin and Yee (in Lieberman, 1988, pp. 40-41) ask rhetorically, 'Are we talking about anything much more than teachers' 'happiness quotients' – a desirable end to be sure, but hardly a compelling issue for policy?' Addressing their own question, they argue that

The vitality of today's schools as well as tomorrow's hinges to a significant degree on the extent to which teachers have a rewarding career. In education, where teachers comprise the technology, the link between individual responses to challenge and change and organizational effectiveness is direct and irreducible.

The unfolding of a career is, after all, a story of waxing or waning satisfaction, commitment, and competence. Without doubt, a variety of other forces are contributing to the growing interest in teachers' professional lives. For one thing, people are staying in teaching far longer, so that the years beyond the initial struggle to survive and gain a minimal level of control over the classroom have taken on increased significance. For another, feminist scholars have given new voice to those who people this still female-dominated profession. Other likely sources of the heightened interest in the teaching career could be adduced, but from our point of view, none is so compelling as the premise that the success of educational reform – indeed, of education – hinges critically upon the growth of the teacher's competence and commitment throughout her career.

With this in mind we ask, what *is* happening to the teaching career? Is it changing, and if so, how? To frame the question more sharply, let us examine two images created a little over 10 years and a continent apart – Dan Lortie's classic *Schoolteacher: A Sociological Study* (1975) and 'School as a Place to Have a Career' by Milbrey McLaughlin and Sylvia Yee (in Lieberman's *Building a Professional Culture in Schools*, 1988). Both studies are based in part on interviews with teachers in five districts (Lortie's in the Boston area, McLaughlin and Chee's in Northern California) and both draw upon a broad array of related research. And there are certain continuities; the structurally flat or 'unstaged' career; and the primacy of psychic rewards – derived from working with young people in the classroom – over extrinsic rewards.

But in 1975 Lortie saw individualistic, present-oriented teachers, left largely to their own devices without a shared technical culture to provide reliable solutions to the problems they confront, yet defending their autonomy within the egg-crate structure of the school, warding off intrusions from colleagues and supervisors (not to mention parents), indifferent to broader influence upon the organization, craving only more time with their own students in their own classrooms, and deriving sparse, uncertain rewards from successes far more modest than their ambitious goals and hopes would seem to countenance.

And in 1988 McLaughlin and Yee found more collegial teachers, eager to build an integrated organization with clear guidelines aligned to a unifying purpose and well-defined goals, seeking to share a sense of responsibility for the school's performance, to assert their needs for adequate resources and tools, to solve problems together and derive satisfaction from the process, to commit to continuous improvement through individual learning coordinated with development of the organization, and seeking refreshment through innovation and periodic changes of assignment.

Has there, indeed, been a sea change in the institutional and organizational environments within which American teachers' professional life cycles are playing out? Did the years between Lortie and McLaughlin and Yee witness a transformation in the structure and culture of schools and of the profession? The

image of a new collegial teaching professional in a ‘restructured,’ ‘recultured’ school certainly pervades contemporary literature on schools and school change (see, for example, Darling-Hammond, 1993, pp. 753-761; Little, 1987, pp. 491-518; McLaughlin & Talbert, 1993; Newmann & Wehlage, 1995).

Though the ‘integrated environment’ of shared purpose and mutual collegial support dominates the image of schools and careers presented by McLaughlin and Yee, they still lament that, ‘Unfortunately, most teachers work in schools where these features are uneven or absent.’ They found many teachers in schools that look more like the teachers and schools that Lortie found – in ‘segmented environments’ characterized by individual objectives and responsibility for performance, evaluation focused on eliminating ‘incompetents’ rather than nurturing growth by all, self protection through problem-hiding and blame-fixing rather than joint problem solving, a minimum of collegial exchange, division among teachers, and consequent low morale.

Perhaps, however, we are witnessing the early stages of a process that could ultimately issue in broad and deep changes in the teaching career and teachers’ experience of the career. How would we know? What kinds of educational policies or professional movements might support productive changes in the career? How should various ‘consumers’ of research – from policy makers to local administrators to teachers and teachers’ organizations – make sense of and assess the burgeoning literature on the teaching career? What theoretical perspectives and methodological approaches should guide additional research in this area?

As the title of this chapter suggests, professional lives or careers, including those of teachers, have been studied from more than half a dozen distinct perspectives. Or, to use a different metaphor, there are several different schools of thinking and research on the teaching career, each with distinctive theoretical and methodological (or epistemological) assumptions. One set occupies itself with the stories of individual lives – or with the career dimension and segment of individual lives – captured in

- (a) autobiographical narratives of teaching, or
- (b) professional biographies, life histories, or case histories that are composed by others, sometimes in collaboration with teachers.

As we shall see, the former tend to stick closely to the unfolding story of the career as the author experienced it. The interpretations they do include are generally the teacher’s own, derived (or at least presented as though they were derived) directly from her experience. In other words, these accounts tend to be atheoretical, phenomenological, feminist, or hermeneutic in orientation. By contrast, biographies or life histories tend to include more explicit interpretation drawn from the traditions, concepts, and formats of literary biography, history,

psychoanalysis or psychosocial theory, anthropology, or sociology. Nevertheless, they remain primarily stories of individual teachers' lives, with all of the strengths and limitations of single cases.

The second major set examines larger numbers of teaching careers from within various theoretical and methodological traditions in order to create accounts not of individual careers or professional lives, but of patterns in the career paths taken by the teachers studied and of the dynamics that underlie or explain these patterns. Included here are sociological, anthropological, social-psychological, career theory, life-course theory, and developmental contextualist accounts of the career. Though they may use cases or stories of individual teachers' careers as evidence or to illustrate key points, these accounts are conceived and presented primarily in propositional rather than story form. Or, in Bruner's (1986) terms, this second set is predominantly 'paradigmatic,' seeking to identify regularities across many individual careers and to generalize about them; while the first set is predominantly – though not exclusively – 'narrative,' aimed at revealing meaning in individual experience rather than generalizing about it.

In the next two sections, we review the narrative and paradigmatic literatures on the teaching career, situating these studies of teachers within the broader theoretical and epistemological traditions that supply their key concepts and methodologies. Then, in a concluding section, we return to the question of what these literatures might imply for governmental policy or professional action.

NARRATIVE ACCOUNTS OF THE TEACHING CAREER

We see the emergence of autobiographical and biographical accounts of teaching – or 'teachers' stories' – as a reflection of work in narrative and life history across the academic disciplines. Thus, 'teachers' stories' can be understood, evaluated, and indeed, appreciated, in terms offered by other fields themselves having complex histories and lively current debates about methods and uses. A complete survey is beyond the scope of this chapter. We focus here primarily on the behavioral and social sciences as a backdrop to the specific work by and about teachers. We then offer an account of the key themes and problems in recent work based on 'teachers' stories' and conclude the first half of the chapter with comments on the strength and limits of the focus on individual narratives of teaching careers.

The Case for Narrative Inquiry and the Search for Meaning in Careers

When he used the phrase, 'The Narrative Construction of Reality', as the title of a recent essay, Jerome Bruner registered growing recognition in many fields

of the significance of stories in human development and social life. Since the early 1980s narrative has been the object of considerable theorizing in old and new fields (see Mitchell, 1981, for a widely-cited selection of views of narrative deriving from literature, history, and philosophy). Feminism, for example, has been a strong influence on the revival of educational interest in narrative, particularly with regard to reforming classroom practices, the value of 'caring,' and 'dialogue' as features of a more relational approach to learning, and the need to reclaim the 'voices' of those in the system whose interests have been misrepresented or ignored (e.g., Witherell & Noddings, 1991).

The case for narrative in education is ambitious, reflecting:

- (a) the desire for the reform of teaching and the ethical norms that guide it;
- (b) ideas about gendered epistemology and the lives and careers of students and teachers; and
- (c) proposals for change in the ways that education itself is studied by both professors as a university subject and by public school teachers themselves with the advantages they have of practice and experience.

Accordingly, narrative has become a large category for work that employs 'storytelling' of some kind with one or another of these purposes.

It is, of course, not only the educational experiences of teachers and students which can be better understood with narrative. We all live, we are now often told, 'storied lives' where narrative guides experience as well describes or explains it (Freeman, 1993; McAdams, 1985; Rosenwald & Ochberg, 1992; Sarbin, 1986). As (mainly) psychologists propose, narrative is a form of knowing that supplies a temporally organized and ordered 'self-concept.' When made part of the 'plot' of our lives, educational, professional, and other experiences gain meaning. Careers and lives are unified by the narrative 'impulse' as their episodic and contingent character are subordinated to the sense that can be made of their long term relations and significance. Donald Polkinghorne (1991), one of the leading proponents of narrative, summarizes its uses:

Human existence is temporal. We do not come to self-understanding by seeking to know what kind of thing we are. Rather, we come to know ourselves by discerning a plot that unifies the actions and events of our past with future actions and the events we anticipate. Relating separate events that occur over time involves the cognitive operation of narrative structuring. Narrative structuring gives sense to events by identifying them as contributing parts of an emplotted drama. Self-concept is a storied concept, and our identity is the drama we are unfolding. (p. 149)

In a teacher's personal narrative, or an account by someone else of a teacher's life, narrative represents the effort to give form and meaning to a career, and the

Chapter 3: Becoming a Teacher: Self and the Social Location of Teacher Education

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INTRODUCTION

Cutting across several literatures, 'Becoming a Teacher' is anything but a simple topic. I have had to set some parameters. Because preservice teacher education confronts what Lortie (1975) called an 'apprenticeship of observation,' I necessarily touch on issues related to teacher development grounded in biography and prior experience. Recognized as developmentally important, the first or second years of inservice teaching form an additional parameter (see Olson & Osborne, 1991). With only an occasional exception, most of the studies I draw on were published or presented within the last five years and build on earlier research. This was necessary in order to make the task manageable. I recognize the inherent dangers that come when drawing on studies produced in different countries and contexts, and so I have tried to exercise caution when linking studies and making comparisons.

The chapter is organized into several sections, beginning with a brief discussion of teacher socialization. I then present the story of becoming a teacher that emerges from much of the literature, along with a synopsis of that story that supports efforts to explain teacher development through stage theory. Sections follow that illustrate the complexity of becoming a teacher, and how much of the process is idiosyncratic, dependent on the interaction of person and place (see Yee, 1990). Attention then turns to the centrality of prior experience and teacher beliefs in becoming a teacher and to contextual influences, including the wider cultural context within which students become teachers and within which teacher education takes place and beginning teachers work. A discussion of some of the issues facing formal teacher education then follows along with a section that presents a portion of the range of innovative responses to the problems and challenges facing teacher educators including changes in process, content, and field work context. The latter includes discussion of the PDS (professional development school) movement. The chapter is framed by the belief that the school is a site of the clashing of modern and postmodern worlds, a clash which presents teachers with conflicting demands that make it increasingly difficult to form a professional identity. A case is made for a respectful

teacher education, one that focuses on self-formation, that engages beginning teachers in exploring their beliefs and the contexts within which they learn to teach in relationship to their moral responsibilities to care for and educate young people. The argument supports a process- rather than an outcomes-driven view of teacher education, a view that includes a challenge to teacher educators to consider our own commitments, our orientations to the good. In the final section, I note that becoming a teacher continues long after preservice teacher education ends, and that ultimately a respectful teacher education involves linking pre- and inservice education.

SOCIALIZATION

The phrase, 'becoming a teacher,' is broad and slightly slippery, yet that is what this chapter is about. Because of its functionalist baggage, I have hesitated to use the term socialization to describe my focus. Nevertheless, my views have been heavily influenced by recent socialization research that shows the process of becoming a teacher to be 'highly interactive' and fraught with contradiction, involving the 'constant interplay between choice and constraint,' a process 'that teachers influence and shape...' even while seeking a place in the community of educators (Zeichner & Gore, 1990, p. 341). The message is clear: 'The community shapes the individual... but the individual also shapes the community' (Prawat, 1991, p. 240). Thus, becoming a teacher is 'not a simple transition from one role to another; it is a social process involving complex interactions between and among prospective and experienced teachers and their social situations' (Lawson, 1992, p. 164). A functionalist view blinds us to the ways in which we are, as Shakespeare would put it, 'self-borne' (King Richard II, III.ii.80). I am especially concerned about this aspect of becoming a teacher, an area that has received comparatively little attention.

A STORY, IN GENERAL

When viewed at a distance, and perhaps through slightly squinting eyes, a pattern appears running through many tales of becoming a teacher that can with some ease be put into narrative form – 'a setting-complication-resolution structure' (Nespor & Barylske, 1991, p. 810), a story. The general themes are of certainty giving way to experimentation and eventual stabilization (Huberman, 1993); of trial and error approaches to learning to teach giving way to more systematic development (Featherstone, 1993; Johnston, 1994), of a clashing of conceptions of self with institutional role expectations and of an eventual but not always happy resolution. That this is a rather common story is supported by large

empirical studies from such diverse places as Switzerland (Huberman, 1993), Australia (Smith, Cook, Cuddihy, Muller, Nimmo, & Thomas, 1991), and the United States (Marso & Pigge, 1989), as well as numerous case studies (e.g., Aitken, 1994; Aitken & Mildon, 1991; Bullough, 1989a; Schmidt & Knowles, 1993).

The story itself is composed of a series of 'chronologies' (Britzman, 1991) that represent turning points in the tale, stories embedded within stories:

Students who enter teacher education bring with them their first chronology negotiated throughout their cumulative classroom lives.... Their student experiences in the university and teacher education constitute the second chronology. Student teaching furnishes the third chronology.... A fourth chronology begins once the student teacher becomes a newly arrived teacher.... Each ...represents different and competing relations to power, knowledge, dependency, and negotiation, and authorizes frames of reference that effectuate discursive practices in teaching. (p. 55)

The story of becoming a teacher begins, then, well before the neophyte enters a teacher education program. It begins at birth, a point to which I will return, but more formally with the 'apprenticeship of observation' that Lortie (1975) called to attention and so felicitously labeled. The point is now taken for granted, although what to do about it remains a source of lively debate. Neophytes come to teacher education having spent thousands of hours sitting in classrooms as students, presumably learning and observing teaching, and some come from families of teachers and have grown up playing teacher. As students, they know teaching from one side of the desk and often assume that they know it from the other as well. Their familiarity with teaching is both a blessing and a curse to becoming a teacher. This fact distinguishes teacher education from other forms of professional education and sets for it a uniquely difficult educational task, one often forgotten by those who long for high status professionalism. Thus, many beginners enter teacher education already certain of their ability to teach but lacking an 'appreciation for the complexity and uncertainty of the teaching-learning relationship' (Weinstein, 1990, p. 279) and resistant to efforts to reconsider their views (Kuzmic, 1993). Their certainty, in part, is based on the view that caring is the essence of good teaching, and above all else beginning teachers care and are warm, friendly, and understanding, or at least perceive themselves as such (Perry & Rog, 1992; Weinstein, 1989, 1990). A service ethic motivates them to teach (Morales, 1994).

Once admitted to teacher education, beginners are anxious to get into the schools, to show their stuff. Direct classroom experience, they assume, is the most important aspect of becoming a teacher: 'The myth that experience makes

the teacher, and hence that experience is telling in and of itself, valorizes student teaching as the authentic moment in teacher education and the real ground of knowledge production' (Britzman, 1991, p. 7). Being perceived as too theoretical, foundations courses take a beating (Stones, 1989), as do methods courses taught by presumably out of touch professors who offer content judged 'irrelevant' (Hatton, 1994). The situation is exacerbated by the 'lack of articulation between course-work and field experiences [which is] a common problem in teacher education' (Feiman-Nemser & Buchmann, 1989, p. 376). In effect, for the many beginning teachers who already assume they know enough to teach and who frequently assume that 'teaching subject matter involves telling or showing' (McDiarmid, 1990, p. 13), practice teaching is synonymous with teacher education.

Student teaching begins on a high note. Beginning teachers fully expect to be extraordinary: 'I'm going to go out and set the world on fire and things are going to be wonderful' (quoted in Wildman, Niles, Magliaro, & McLaughlin, 1989, p. 473). Weinstein, for example, reports that of the teacher education students she studied prior to beginning field work, 92% rated themselves "slightly above average,' 'above average,' or 'much above average,' with respect to their teaching performance' (1990, p. 282). During student teaching, however, optimism often gives way as the neophyte seeks to negotiate a personally satisfying, productive, and institutionally acceptable teaching role within someone else's classroom and begins to confront knowledge limits, particularly about students, but also about adapting content for secondary teacher education students (Huberman, 1993, p. 199). As one student remarked:

Part of my problem with feeling that the practicum was a performance exam rather than a learning experience was tied to my perception that I wasn't allowed to try alternative methods and that I was expected to adopt the teaching style of my cooperating teachers. This perception was tied to my image [of myself as independent]. I'm uncomfortable in situations that seem unnecessarily limiting or restricting, or when I'm expected to behave in ways that seem unnatural to me. Student teaching wasn't a happy experience. Only now am I beginning to understand that part of my negative feelings was due to a sense of selling out – compromising who I am in a desperate attempt to please my cooperating teachers and hating myself for it. I never shared these feelings with those teachers.... (Clift, Meng, & Eggerding, 1994, p. 269)

Contradictions abound, as 'preservice teachers strive to enact or play out their personal images of teaching despite contextual realities which are often at odds with them' (Cole & Knowles, 1993, p. 459). Ironically, as Stones puts it, 'there is not the remotest possibility of student teachers becoming clones of the teachers

they observe' (1989, p. 4). Tension results from seeking to 'be myself,' as one beginning teacher put it (Schmidt & Knowles, 1993), while simultaneously seeking to fit into a cooperating teacher's program in order to assure a good evaluation and to establish authority within the classroom (Johnston, 1992). Beginning teachers badly want to belong, to be 'defined as a teacher by pupils and accepted as a teacher by colleagues' (McNally, Cope, Inglis, & Stronach, 1994, p. 229). Student teacher and cooperating teacher philosophies sometimes conflict unhelpfully (Clift, Meng, & Eggerding, 1994). The developmental and evaluative responsibilities of cooperating teachers intertwine, and the result is increased novice vulnerability and conservatism, an unwillingness to take risks (Bullough, 1990; Stark, 1994). And tension results when students turn out to be unlike what was expected, unlike what the beginning teacher believes she was like as a student, a belief that serves as a model, the 'right way' for how others learn (Hollingsworth, 1989; Holt-Reynolds, 1992; Knowles & Holt-Reynolds, 1991). These differences often have a profound influence on beginning teacher development (Bullough, Knowles, & Crow, 1989). Greater professional growth appears to be associated with the 'tendency to see pupils in multifaceted terms, to reason psychologically, and to respond effectively to pupils' (Kagan & Tippins, 1991, p. 464). To reason in this way often requires adjusting initial views of students and their potential for learning. Not surprisingly, when students do not learn as expected, beginning teachers often blame them for failure (McDiarmid, 1990). Practical concerns dominate (see Alexander, Muir, & Chant, 1992). Management is an especially lively issue – although some classes are so well routinized by cooperating teachers that such issues do not arise until later – and sadly 'student teachers may learn to manage pupils and classrooms without learning to teach' (Feiman-Nemser & Buchmann, 1989, p. 367).

Not surprisingly, beginning teachers usually leave student teaching with their initial views intact. Student teaching is not considered by them to be a 'realistic experience' (Clift, Meng, & Eggerding, 1994, p. 275). They adapt to the 'role assigned to them, focusing on surviving and playing safe' (Stark, 1994, p. 61). They cope with the dilemmas of student teaching in ways that maintain their beliefs, their conceptions of themselves as teachers, while looking ahead to having their own, 'real' classroom. They work 'within the given constraints, while still recognizing that this was not the way they would work in their own classrooms' (Johnston, 1992, p. 132). Thus, they exit teacher education still optimistically anticipating the future.

Teacher education does little to challenge prior beliefs:

Rather than challenging students' initial beliefs, teacher educators tend to focus on issues on which they and their students already agree.... As a consequence, most prospective teachers complete their teacher

Chapter 4: The Life and Work of Teachers

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THE TEACHER'S LIFE AND WORK

Writing in 1975, at the end of what Hobsbawm has called a 'golden age' for Western society (Hobsbawm, 1994), Lortie (1975) summarized the relationship between teachers and educational research studies in the U.S. Whilst those were very different economic and social times, his judgement stands up well today:

Schooling is long on prescription, short on description. That is nowhere more evident than in the case of the two million persons who teach in the public schools. It is widely conceded that the core transactions of formal education take place where teachers and students meet.... But although books and articles instructing teachers on how they should behave are legion, empirical studies of teaching work – and the outlook of those who staff the schools – remain rare. (p. vii)

In general, the point that Lortie makes has continued to be in force in the research discourse as related to teachers – a good deal of prescription and implicit portrayal but very little serious study of, or collaboration with, those prescribed to or portrayed. However, whilst there is continuity, there is also change over time which exists at the intersection of the educational enterprise with social, political and economic history.

A decade after Lortie, in the book *Teachers' Lives and Careers*, Ball and I (writing in 1985) argued that British research on teachers had moved through a number of contemporary phases in the last forty years. At the beginning of this period, in the 1960s,

...teachers were shadowy figures on the educational landscape mainly known, or unknown, through large scale surveys or historical analyses of their position in society, the key concept in approaching the practice of the teaching was that of role. (Ball & Goodson, 1985, p. 6)

Thus, in that decade in most research studies, teachers were present in aggregate through imprecise statistics or were viewed as individuals only as formal role

incumbents, mechanistically and unproblematically responding to the powerful expectations of their role set.

By the late 1960s and early 1970s new approaches were well underway which sought to address some of the limitations of these paradigms. Case study researchers began to scrutinize schooling as a social process, focussing their work on the manner through which school pupils were 'processed.' 'The sympathies of the researchers lay primarily with the pupils, working class and female pupils in particular, who were the 'under dogs' in the classroom, teachers were the 'villains of the piece' (Ball & Goodson, 1985, p. 7). By the 1980s we saw a further shift where attention began to be directed 'to the constraints within which teachers work.... Teachers were transformed from villains to 'victims' and in some cases, 'dupes' of the system within which they were required to operate' (p. 7).

Crucially in terms of the orientation of this chapter, the latter characterization of teachers opened up the question of 'how teachers saw their work and their lives.' Writing in 1981, I argued that researchers had not confronted the complexity of the school teacher as an active agent making his or her own history. Researchers, even when they had stopped treating the teacher as numerical aggregate, historical footnote, or unproblematic role incumbent, still treated teachers as interchangeable types unchanged by circumstance or time. As a result new research methods were needed:

The pursuit of personal and biographical data might rapidly challenge the assumption of interchangeability. Likewise, by tracing the teacher's life as it evolved over time – throughout the teacher's career and through several generations – the assumption of timelessness might also be remedied. *In understanding something so intensely personal as teaching it is critical we know about the person the teacher is.* Our paucity of knowledge in this area is a manifest indictment of the range of our sociological imagination. The life historian pursues the job from his (sic) own perspective, a perspective which emphasizes the value of the person's 'own story.' (Goodson, 1981, p. 69)

Unfortunately, whilst studies of teachers lives and careers now began to be more generally pursued in the educational research community, political and economic changes were moving sharply in the opposite direction, and this was reflected in the kind of studies undertaken. The development of patterns of political and administrative control over teachers have become enormous in the 1980s and 1990s. In terms of power and visibility in many ways this represents 'a return to the shadows' for teachers who face new curriculum guidelines (in some countries like New Zealand and Britain, an all-encompassing national

curriculum), teacher assessment and accountability, a barrage of new policy edicts, and new patterns of school governance and administration.

NEW DIRECTIONS FOR STUDYING THE LIFE AND WORK OF TEACHING

Recent work by qualitative researchers suggests innovative and interesting ways to address the goal of understanding teachers' *personal practical knowledge* (Connelly & Clandinin, 1989). The addition of the personal aspect in this formulation is a positive development, hinting as it does at the importance of biographical and personal perspectives. Other traditions have focussed on the reflective practitioner, on teachers as researchers of their own practice, and on phenomenological approaches to practice. Personal experiences thus are linked irrevocably to practice. It is as if the teacher *is* her or his practice. For teacher educators, such specificity of focus is understandable, but broader perspectives might achieve even more, not solely in terms of understandings, but ultimately in ways that feed back into changes in practical knowledge, public policy, and intimately broader theoretical understandings.

There are similar reservations about the 'reflective teacher' or 'teacher as researcher' mode of teacher education. The 'teacher as researcher' approach suggests a number of problems. Stressing that the teacher becomes the researcher of his or her own practice appears to free the researcher in the academy from clear responsibility in this process. But in my view, such researchers have a primary but somewhat neglected responsibility for sponsoring and sustaining the teacher as researcher. Hence, new traditions are developing which oppose the notion that the focus of the teacher as researcher should be mainly upon practice. In some ways, this focus on practice is the logical outcome of the 'teacher as researcher,' for its converse is the 'researcher as teacher.'

The work of teachers is politically and socially constructed. The parameters of what constitutes practice, whether biographical or political, range over a wide terrain. To narrow the focus to 'practice as defined' is to make the focus of research a victim of historical circumstances, particularly political forces. In many ways, 'the forces of the market,' as articulated by the politicians of the New Right, is seeking to turn the teacher's practice into that of a technician, a routinized and trivialized deliverer of a predesigned package. To accept those definitions and to focus on 'practice' so defined is tantamount to accepting this ideology. By focussing on practice in a narrow way, the initiative for defining the research agenda passes to politicians and bureaucrats. Far more autonomous and critical research will be generated if the research community adopts wider lenses of inquiry for the teacher as researcher. We need then to move well beyond the grasp of what I have called elsewhere the 'practical fundamentalists' (Goodson, 1995b, p. 145).

The new traditions that seek to broaden the focus of work with teachers range from life history and biographical studies (Goodson 1981, 1988, 1992; Goodson & Walker, 1991), to collaborative biography (Butt, Raymond, McCue, & Yamagishi, 1992), to teacher's professional and micropolitical knowledge (Goodson & Cole, 1993; Russell & Munby, 1992), and through a wide range of interesting and innovative feminist work (Acker, 1989, 1994; Delhi, 1994; Smith, 1990). This work seeks to broaden the focus of teacher education and development to include the social and political, the contextual, and the collective.

In particular, life history studies seek to broaden the focus of work with teachers. This work takes the 'teacher as researcher' and 'action research' modes as valuable entry points, but it moves to broaden the immediate focus on practice and on individual classrooms. Life history work is *par excellence* qualitative work. The pioneering work of Thomas and Znaniecki (1927) and other proponents at the Chicago School in the 1920s and 1930s is part of the qualitative legacy. Subsequent work, notably by Dollard (1949) and Klockars (1975) has continued the tradition of American scholarship. In Britain, the work of Paul Thompson (1988) and his use of life histories to study aging has continued to rehabilitate and develop the life history tradition.

In teacher education and teacher development, much pioneering work has been undertaken. The work of Sikes, Measor, and Woods (1985) is helpful in developing our understanding of teachers careers, as is the study, *Teachers Lives and Careers* (Ball & Goodson, 1985). The study by Hargreaves (1994b), *Changing Teachers, Changing Times*, adds a valuable contextual commentary to our understanding of the enormous global changes that are affecting the life and work of teachers (see also the chapter by Robertson in this volume].

Lawn (1990) has written powerfully about teachers' biographies and of how teachers' work has been rapidly restructured in England and Wales. The teacher, he argues, has moved from 'moral responsibility' – particularly with regard to curricular matters – to a narrow technical competence. Teaching in short has had its area of moral and professional judgment severely reduced. He summarizes recent changes in this way:

In the biographies of many teachers is an experience of, and an expectation of, curriculum responsibility not as part of a job description, a task, but as part of the moral craft of teaching, the real duty. The post-war tradition of gradual involvement in curriculum responsibility at primary and second level was the result of the wartime breakdown of education, the welfare aspects of schooling and the post-war reconstruction in which teachers played a pivotal, democratic role. The role of teaching expanded as the teachers expanded the role. In its ideological form within this period, professional autonomy was created as an idea. As the post-war consensus finally collapsed and corporatism

was demolished by Thatcherism, teaching was again to be reduced, shorn of its involvement in policy and managed more tightly. Teaching is to be reduced to 'skills,' attending planning meetings, supervising others, preparing courses and reviewing the curriculum. It is to be 'managed' to be more 'effective.' In effect the intention is to depoliticize teaching and to turn the teacher into an educational worker. Curriculum responsibility now means supervising competencies. (p. 389)

Likewise Susan Robertson (1993) has analyzed teachers' work in the context of post-Fordist economies (see also Robertson, 1996, for a more extended analysis). She argues that again the teachers' professionalism has been drastically reconstructed and replaced by a wholly 'new professionalism.'

The new professionalism framework is one where the teacher as worker is integrated into a system where there is

- (i) no room to negotiate,
- (ii) reduced room for autonomy, and
- (iii) the commodity value of flexible specialism defines the very nature of the task.

In essence, teachers have been severed from those processes which would involve them in deliberations about the future shape of their work. And while many teachers are aware that change is taking place and talk of the 'good old days,' few are aware of the potential profundity of that change even when it is happening in their midst. Clearly educators have been eclipsed by a core of interests from the corporate sector and selected interests co-opted in the corporate settlement. (Robertson, 1993)

These major restructurings of the work and life of teachers highlight the limitations of those methods which focus on the practical and personal worlds of teachers. Teachers' personal and practical reminiscences and commentaries relate to their work and practice. So such data in the new domain described by Lawn and Robertson will be primarily about work where moral and professional judgement plays less and less of a part. By focussing on the personal and practical, teacher data and stories are encouraged which forgo the chance to speak of other ways, other people, other times, and other forms of being a teacher. The focus of research methods solely on the personal and practical is then an abdication of the right to speak on matters of social and political construction. By speaking in this voice about personal and practical matters, the researcher and teacher both lose a voice in the moment of speaking. For the voice

Chapter 5: Teaching as Women's Work

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Feminists are almost as unwelcome as divorcees, because their unorthodoxy on women's place in the world arouses criticism and is likely to be accompanied by an agitating spirit in other matters. Besides, men do not like feminists, and most administrators are men. (Beale, 1936, p. 497)

Women teachers were a transient group, withdrawing after a few years of service to be married. This reduced their political effectiveness, slowed up educational reforms, and impeded the improvement of professional welfare. Men were more active in the work of teachers' associations and their more intimate knowledge of civic affairs made them better strategists in dealing with state legislatures and boards of education. (Elsbree, 1939, p. 207)

Despite the fact that most teachers have been women in the United States for well over 100 years, this fact has been viewed with criticism, surprise, and even alarm. As seen in the above two quotes from the 1930s, one of the authors criticizes women teachers for being *too* politically active, and the other blames women teachers' lack of political effectiveness on their 'transient' work patterns. Why did some believe that the predominance of women in teaching was alarming? Why were such strict and rigid rules and policies implemented to control the growth of women in teaching as well as to control the behaviors of those who taught? What have been the long-term effects of these attitudes on the profession of teaching? This chapter will explore answers to these questions.

Schmuck (1987a) wrote that the social history of the United States 'reveals persistently equivocal attitudes about the status of education. From the earliest days of our republic, teachers have been the source of ridicule, condescension, or pity' (Shulman & Sykes, cited in Schmuck, 1987a, p. 92). Schmuck added that the image of teachers as 'deficient' has been a reflection of the public's negative view and low regard for teachers. Her view has been reiterated by others.

Has the public image of the teacher changed? Many would insist that it has slipped from a place next to motherhood, love, and religion down

the scale to a spot close to mothers-in-law, income tax, and measles.
(Huffman, 1970, p. 223)

In an historical overview of the effects of gender on teaching, Clifford (1989) described how both men and women teachers have suffered from negative images. The goofy male schoolmaster, as personified by Washington Irving's Ichabod Crane, created a lasting image in the public mind, as did the image of women teachers as persnickety, unidimensional, sexless spinsters. It was believed that male teachers who had talent and intelligence left teaching for better jobs, and female teachers left teaching who had the feminine wiles to catch a man and the natural 'instinct' for bearing children. Clifford's work illustrated how these stereotypical images have had long-term effects on teaching as a profession.

A recent volume edited by Joseph and Burnaford (1994), entitled *Images of Schoolteachers in Twentieth-Century America: Paragons, Polarities, Complexities*, looked closely at the images of teachers depicted in American culture in this century. It included images found in the media, television, films, and song lyrics, images found in children's textbooks, textbooks written for teachers, in adult fiction, and in children's literature, as well as those found in metaphors used by teachers and students in contemporary society. As seen in the title of their book, the authors classified the images of teachers into three categories: as paragons (the euphoric ideal stereotype of the self-sacrificing, moral, and patient person), in polarities (teacher as hero versus teacher as villain), and as complexities (the complex range of views teachers have of themselves as intertwined with those held in society). The common theme found across sources was negative; that of the 'terrible teacher' or the teacher as an 'obnoxious caricature.'

These caricatures or stereotypes are numerous and differ from one another, but all are negative and all reduce the teacher to an object of scorn, disrespect, and sometimes fear. Teacher as buffoon and bumbler, as rigid authoritarian, and as terrifying witch – with uncontrolled and irrational flights of anger and punishment – all pervade the material studied by the contributors. (1994, p. 15)

Based on the work in Joseph and Burnaford's volume, teachers have not been seen in the public's eye, the media, nor in the literature, as valued members of society. These sources of information, for the most part, are targeted toward children and shape their images of teachers in an exaggerated negative direction. An overriding fact that cross-cuts these negative themes is that because most teachers are women, the negative images of teachers translate into negative images of women.

Until recent times, the fact that most teachers are women has not been included in research or scholarly work as a factor influencing the nature of teaching. For example, of the vast literature on teachers, two of the most often quoted in contemporary times are Dreeben (1970) and Lortie (1975). Although Casey and Apple (1989) referred to Dreeben and Lortie as classic works on teaching as a profession, they also pointed out that these seminal works regarded women teachers as deficient as well as uncommitted to their work because of family obligations.

A third classic work by Willard Waller (1932) not only mentioned gender as a factor in understanding teachers, but also reflected near contempt towards women teachers throughout the work. In an analysis of Waller's book, Hansot (1989) concluded that Waller described a depressing picture of 'unrelieved pessimism' toward teachers and viewed them as 'seriously flawed human beings.' She found that Waller's writing was similar to that of a Greek tragedy through his creation of a bleak moral landscape with teachers as victims of communities. Waller's pessimism about teachers in general is seen in the following:

Concerning the low social standing of teachers much has been written. The teacher in our culture has always been among the persons of little importance, and his place has not changed for the better the last few decades. Fifty years or more ago it used to be argued that teachers had no standing in the community because they whipped little children, and this was undoubtedly an argument that contained some elements of truth. But flogging, and all the grosser forms of corporal punishment, have largely disappeared from the modern school, and as yet there is little indication that the social standing of the profession has been elevated. (Waller, 1932, p. 58)

But when writing specifically about women teachers, Waller's judgments were much more severe, particularly regarding single women.

The life history of the unmarried teacher seems to follow a pretty definite pattern. There are a number of years in which the hope of finding a mate is not relinquished. There is a critical period when that hope dies. An informant has suggested that hope has died when a woman buys a diamond for herself. The critical period is an incubation period during which spinsterhood ripens. During this critical period many desperate and pathetic things occur. The woman going through this period falls in love very easily, and may come to make the most open advances upon slight or no provocation.... Perhaps this hope of finding a mate always dies hard and slowly, and requires little stimulant to keep it alive after its time. (Waller, 1932, pp. 408-409)

Texts for teachers which specifically discuss women's roles in teaching are important documentary sources because they serve as basic overviews of information considered crucial for teachers to know. They have been widely read by generations of education students when in teacher training in colleges and universities. Good examples were found from the first decades of the twentieth century in Almack and Lang (1925), Elsbree (1928, 1939), Peters (1934), Beale (1936, 1941), and Donovan (1938). Also of interest were works written through the proceeding decades, including Fine's (1952) *Opportunities in Teaching*, Filbin and Vogel's (1962) *So You're Going to be a Teacher*, Stinnett's (1962) *The Profession of Teaching*, Gelinas' (1965) *So You Want to be a Teacher*, and Brenton's (1970) *What's Happened to Teacher?* All described the work of teachers and mentioned issues of gender in teaching. This list is by no means exhaustive, but because they are representative of a genre of work, they will be drawn upon in this chapter.

The often unflattering portrait painted of teachers in much of the literature is offset by recent work in the *historiography* of teaching. Prentice and Theobald (1991) pointed to the development of the historiography of women teachers as important to filling the striking absence of women in the history of teaching. These works have offered views of the world of teaching from the personal perspectives of those who taught and have provided a more realistic view of teaching than the idealized images in the media or the dispassioned discussions in research reports and in texts (e.g., Cuban, 1984; Hoffman, 1981; Kaufman, 1984; Myres, 1982; Rothschild & Hronek, 1992; Warren, 1985, 1989). Such overviews are found in Hoffman (1981), Kaufman (1984), and Altenbaugh (1992), each of whom examined women's personal accounts of their teaching in the United States at the turn of the century, as did Spencer's (1986) accounts of contemporary women teachers. Teachers' accounts in other countries are found in Goodson's (1992) volume of life histories (New Zealand, Canada, the U.S., and the U.K.), as well as Prentice and Theobald (1991) who focused on women teachers in England, Australia, Canada, and the United States, and De-Lyon and Migniuolo (1989) and Acker (1989) who looked at British teachers. These historiographical studies have made a significant contribution to a better understanding of women's roles in the history of teaching.

WOMEN IN TEACHING: AN HISTORICAL OVERVIEW

Three economic periods have been identified in relation to the transformation of women's place in the labor market: the family-based economy, the family-wage economy, and the family-consumer economy (Anderson, 1983; Tilly & Scott, 1978). These economic periods are roughly parallel to historical time periods used to examine the history of teaching: the Pre-industrial period (the

Colonial period in the United States), the early industrial period (the nineteenth century), and the mature industrial period (the twentieth century) (Parelius & Parelius, 1987). These economic and historical periods will be discussed here with particular focus on their effects on teaching as women's work.

Family-Based Economy/Preindustrial Period

During the periods of the family-based economy (the seventeenth and eighteenth centuries), there were no sharp distinctions between economic and domestic life. The work of family members was interdependent with all family members contributing to household labor. Men, women, and children worked together in the production of goods. Teaching, as a choice of labor outside the home, was taken as temporary work to supplement men's income (Parelius & Parelius, 1987). The view of teaching as temporary work led to the lasting perception of teaching as an 'episodic' occupation (Clifford, 1989).

Although teaching rarely required specific qualifications in the United States during this period, in the New England states there were more rigorous standards where teachers taught in either town schools or Latin Grammar schools. In town schools teachers were not as well-educated and earned about half as much as the Latin Grammar teachers. Teachers in the latter had college degrees and were held in high regard in their communities. All were males who had to be sanctioned by the church.

Beale (1941), in an overview of schooling in Colonial America, wrote that the inadequacies of teachers in this period were linked to the fact that schoolmasters were usually ministers who supplemented their salaries by teaching. Although training in the early colonial period was exceptional because ministers were well-educated in England, by the second and third generations of colonists, ministers were locally trained. As a result, they were less well-educated. In an attempt to improve the quality of teachers, in 1701 an act was passed in Massachusetts which required a full-time teacher in schools. This stipulation disallowed ministers who could not devote full-time work to teaching. Beale thought it kept the best educated people from teaching.

There were high rates of teacher shortages in this period. Beale (1941) cited many examples in Colonial records showing that no suitable teachers could be obtained in communities. At times, because of teacher shortages, colonists purchased indentured servants as teachers. They were willing to take who they could get even if they were redemptioners or convicts.

Elsbree (1939) wrote that the main reason teachers were mostly men during the Colonial Period was that they were the most educated. Women's place was thought to be in the home, not in the classroom. He added that there were other reasons for reliance on men; boys had to be kept under control by being beaten.

Chapter 1: The Study of Teaching: Modern and Emerging Conceptions

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In the past 30 years, research on teaching has displayed an amazing burst of energy and has generated many important concepts and research findings. One prominent feature of this effort has been researchers' willingness to observe instructional process and to conceptualize the complex interactions of classrooms as fast moving social settings. Prior to 1960 most educational research (whether conducted by educators, sociologists, or psychologists) used research methods that excluded direct examination of instructional process. Modern research, in contrast, has included observation of classroom processes and detailed interviews with students and teachers. These data sources have generated greater awareness of the complexities of classroom life and have begun to steer theory away from simple notions to more complex, contingent, contextualized knowledge about what makes for good teaching.

Although identifying the start of modern research in any area is difficult, clearly the first *Handbook of Research on Teaching* (Gage, 1963) had an important impact upon the field. This publication provided authoritative account summaries of research to that date and called for better observational studies of teaching. The dominant paradigm for the study of teaching immediately prior to the onset of observational research had been research on teacher personalities. Teachers who had certain personalities (warmth, openness) had been thought to be better facilitators of student achievement in the classroom than teachers who did not have these characteristics. By the mid 1960s, however, many researchers were beginning to debunk the myth that there was a 'personality for teaching' (Getzels & Jackson, 1963), and this led to calls for better research on the *processes* of teaching.

It is beyond the scope of this introductory essay to provide a historical analysis of the various ways researchers responded to this call (for extensive coverage see Anderson, 1995; Good, 1996). However, it is instructive to understand that several different research paradigms for exploring instruction and learning in classrooms became influential within a short time period.

Research Perspectives and Progress

One major goal of researchers, especially in the 1960s and 1970s, was to demonstrate that variation in the behaviors of teachers could be related to student learning. The title 'teacher behavior' subsumes hundreds of studies with different intentions, research methods, and findings. For example, included within this research tradition were studies of specific teaching behaviors such as 'indirectness,' clarity, or enthusiasm (see, for example, Flanders, 1970); investigations of teachers' management behavior toward the whole class (e.g., Kounin, 1970); wait time research (e.g., Rowe, 1969); naturalistic process-product studies (e.g., Brophy, 1973); research on instructional pace and content coverage (Barr & Dreeben, 1983); and experimental studies of process-product relations (Clark, Gage, Marx, Peterson, Stayrook, & Winne, 1979; Evertson, Anderson, Anderson, & Brophy, 1980).

Another emphasis that flourished in the past 30 years has been research on the effects of teacher cognition. Many types of teacher thought have been explored within this broad tradition including teacher expectations for students (Good & Brophy, 1973); teacher conceptions of the teacher's role (Biddle, Rosencranz, & Rankin, 1961); teacher decision making (Borko, Cone, Russo, & Shavelson, 1979); teachers' conceptions of lessons (Leinhardt & Putnam, 1987); teachers' ideas about subject matter (Shulman, 1987); teachers' expert knowledge (Berliner, 1992); and teacher responsibility, morality, and ethics (e.g., Jackson, Boostrom, & Hansen, 1993; Tom, 1984).

More recently, a flurry of research interest has appeared concerned with student mediation of instructional behaviors. Although research had long demonstrated the effects of instructional behavior in the classroom (see Dunkin & Biddle, 1974), some scholars have also argued that true understanding of classroom events and their implications for student learning cannot be achieved without an understanding of student thinking and student mediation of classroom events. Research responding to this insight has included studies of student social cognition (Rosenholtz & Simpson, 1984; Rohrkemper & Corno, 1988); student learning in small groups (e.g., Webb, 1983); student task literature (Alton-Lee, Nuthall, & Patrick, 1993; Anderson, 1981; Mergendoller, Marchman, Mitman, & Packer, 1988); student passivity (Good, Slavings, Harel, & Emerson, 1987; Sizer, 1984); students' self-regulated learning (Corno & Mandinach, 1983; Pressley & Levine, 1983); student volition (Corno, 1992; Snow, Corno, & Jackson, 1996); and student goal-regulation (McCaslin & Good, 1996).

And if these various traditions of research were not sufficient, other insights about classroom teaching have been generated by the recent flowering of works on the lives of teachers (see Goodson, 1981; Goodson & Hargreaves, 1996). (Chapter 1 of the first volume of this *Handbook* provides a more detailed intro-

duction to this latter tradition, and several chapters representing it appear in that volume.)

Given both the amount of effort and the breadth of perspectives that have characterized recent research on teaching, it is little wonder that scholars have begun to comment on the gains in knowledge that have resulted. Weinert and Helmke (1995) have recently noted, for example, 'It was only 20 years ago that Good, Biddle, and Brophy (1975) wrote, "Do teachers make a difference? No definite answer exists because little search has been directed to the question in a comprehensive way."' (p. 3). Since then, we have gained a good deal of convincing empirical evidence' confirming large differences in the quality of instruction among teachers and classrooms and that these differences have significant impact on students' academic performance (see also Gage, 1991).

New Directions and Contributions

As important as research within these traditions has been, most chapters in this volume assert the need for radical changes in the conceptualization of teaching and learning in American classrooms. These calls for new conceptualization of classroom teaching and learning are based upon various considerations. For example, obvious changes have appeared as many countries in the world have moved from economies based on agriculture and mining, to those based on industry, and are now entering a post-industrial world focused on the provision of services, the exchange of information, and global interdependence. The demographic characteristics of students and teachers are also changing in many countries, and much more information is now available from governments and other sources concerning the status and 'progress' of education in many societies. In addition, competition for tax-supported services has become more acute, and this has led to the flowering of conservative ideologies and attacks on public education (see, for example, Berliner & Biddle, 1995, who deal with the American case). Given such societal changes, it is apparent that goals for schools in the year 2000 will differ sharply from goals that were expressed for schools in 1900, 1950, 1970, or even 1990. And, if there are new goals, it follows that there must be new instructional processes and new forms of learning opportunities for students. The chapters of this volume provide an exciting set of arguments, images, and recommendations about the transformations needed in the teaching-learning process to accommodate these changes.

The volume begins with four chapters focused on student thought and its importance in understanding the processes and effects of teaching. In chapter 2, Graham Nuthall argues that a radical change has recently appeared in educators' conception of students' thinking and learning in classroom settings. He argues that it is no longer possible to retain the concepts and theories that provided

the foundation for virtually all classroom research until a decade ago and that the field is in the midst of a profound paradigm shift. To help with this reconceptualization, he reviews three different traditions of research that beg for synthesis: studies of student thinking in which students are seen as creating or constructing their own knowledge and skills; studies that are sociocultural in orientation in which learning and thinking are conceived as social processes that are laid within specific contexts; and studies that have a sociolinguistic orientation in which the language of the classroom conceived as both the content and the medium of learning and thinking. Chapter 3 by Deborah Ball maintains that no task is more fundamental or difficult for teachers than understanding what students are learning. She argues that there are major challenges in trying to listen to students. For example, teachers must learn from individuals who are quite different from themselves. She suggests that what a student is thinking 'here and now' may not be what they are thinking later in the week and that teachers need to listen to students through multiple contexts. She also asserts that because teachers want children to understand and to learn, they are prone to over-interpret what children might say and do. Her chapter includes suggestions about how teachers may improve their ability to listen and understand students' perspectives – a fundamental necessity if teachers are to implement the perspectives of constructivists.

The fourth chapter – by Phyllis Blumenfeld, Ronald Marx, Helen Patrick Joseph Krajcik, and Elliot Soloway – focuses upon the instructional importance of teaching for understanding. The authors provide a rich historical analysis of how the field of research on teaching has evolved from models stressing the transmission of information to current conceptions of practice which emphasize students' transformation of knowledge. They compare a variety of extant programs that incorporate elements of constructivist thought and identify issues that merit further research. Importantly, these authors also explore issues of emerging technologies in their pursuit of integrating new technology with modern constructions of students' learning.

In the fifth chapter, Barbara Bank reviews research on the peer cultures of children and adolescents and their effects on teaching. She argues that such peer cultures often conflict with teacher's goals and the official school culture, that many discussions of teaching ignore the tensions and contradictions created by peer cultures, and that the latter have important theoretical and instructional implications. She suggests that it is useful to separate three aspects of school culture – academic goals, extra curricular activities, and school discipline policies – and she discusses how each interacts with the peer cultures that students create. She also examines the implications of peer cultures for teaching and offers suggestions about what schools and teachers can do to deal more effectively with peer concerns.

The next few chapters focus on changing conditions in the society that affect teaching. Chapter 6, by Joseph Blase, explores recent research on the social and cultural aspects of the teacher's work with particular emphasis on the micro-politics of teaching. His analysis begins by discussing how individuals and groups use power to advance their interests in various kinds of relationships, such as those that are nominally democratic, collegial, or conflictful. He notes that most micro-political studies of teachers have so far been conducted in traditional school settings. Not surprisingly, these studies suggest that teachers are vulnerable to pressure from other adults in their work, especially to thoughtless, self-serving, or manipulative school principals. He argues that current research illustrates a substantial discrepancy between the expected and actual political roles of teachers in the school restructuring process. Thus, current reforms that stress greater teacher empowerment and more democracy in school decision making may be more illusionary than real.

In chapter 7, Peter Cookson and Charlotte Lucks argue that schools are becoming increasingly politicized and suggest that if the United States continues to adhere to market solutions for public policy, it is likely that public education as a unifying social force will be seriously weakened or destroyed. Although this unfortunate outcome is possible, they argue that the picture need not necessarily be gloomy and that greater teacher autonomy might leave teachers with a strong voice if they can increase their professional autonomy. The authors contend that this can best be achieved by setting higher standards for those who enter and who stay in the profession.

Chapter 8 by Hans Vonk notes that many policies regarding social welfare and the labor market are no longer the primary domain of an individual nation but are also influenced by regional or global events and policies. His analysis leads to the conclusion that the work of teaching in Europe is now becoming more narrowly defined and more thoroughly supervised. He maintains that if teachers want to see themselves as professionals that are fully recognized by governing bodies, they will have to gain some degree of control over the decisions that affect their work and the curricula of teaching.

In chapter 9, Linda Darling-Hammond and Marcella Bullmaster contend that challenges faced in America are also being more affected by the global economy than has been the case historically. They assert that changing social contexts and expectations for learners in the twenty-first century require teachers who can teach for understanding — who can scaffold key ideas in part by anticipating misconceptions that students have. Such skills should allow teachers to create learning experiences that build upon students' own thinking, while at the same time reflecting the standards of inquiry in a particular discipline. This suggests that teachers must diversify classroom practice and must allow for greater variability rather than assuming uniformity in learners.

Chapter 2: Understanding Student Thinking and Learning in the Classroom

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INTRODUCTION

The original purpose of this chapter was to provide an account of student thinking in the classroom. There was a time, some years ago, when the content of such a chapter would have been self-evident. It would have included research on the development of problem solving skills and on the ways in which teachers could encourage students to use higher-order cognitive skills by asking appropriate questions and setting appropriate problems. My own early studies of 'classroom interaction' were concerned with the logical demands made by teachers' questions and the effects these had on students. The results were published under the title of *Thinking in the Classroom* (Nuthall & Lawrence, 1965). The categories and concepts that were used to set clear boundaries around different types of classroom behaviour were largely borrowed from research in the psychological laboratory (e.g., Bruner, Goodnow, & Austin, *A Study of Thinking*, 1956; Skinner, *Verbal Behaviour*, 1957) or from logic and analytic philosophy (e.g., Hirst & Peters, *The Logic of Education*, 1970; Smith & Ennis, *Language and Concepts in Education*, 1961).

As recently as 1986, a review of student thought processes in the classroom (Wittrock, 1986) could make a clear distinction between thinking and learning and achievement. Thinking was seen as a distinct set of processes that took place in the student's head and mediated between teaching or instruction and classroom behaviour and learning. The range of processes included in thinking had widened since the previous decade, but there was no question that thinking processes were distinct and easily distinguishable from learning and achievement. Thinking was considered 'higher order,' while learning (especially of knowledge and practical skills) was seen as important but of a lower order.

There has, however, been a radical change in conceptions of thinking and learning in the classroom in recent years. New perspectives, introduced from a range of different disciplines (e.g., linguistics, sociolinguistics, aesthetics, semiotics, social anthropology, literary criticism), a range of different methodologies (e.g., ethnomethodology, phenomenography, discourse analysis, textual criticism) and cultural perspectives (e.g., Soviet psychology) have produced

what appears at first glance to be a confusion of new ways of conceptualising and understanding student experience in the classroom.

Whether we like it or not, it is no longer possible to retain the concepts and theories that lay behind most classroom research until a decade ago. Distinctions that used to be made between thinking and learning, between language and thought, between the individual and the social, have all become problematic. New processes and concepts are being suggested that do not fit within the traditional disciplines that used to inform classroom research. For those who believe in the value of constant challenge and change, or who accept the post-modernist perception of everything as endlessly evolving particularities and subjectivities and delight in disrupting established discourses (Lather, 1991), these are exciting times. For the writer of a review of recent research on student thinking in the classroom, it presents considerable problems.

What I have attempted to do in this chapter has been to bring together as many recent studies of student experience in classrooms as I could and try to identify the common themes and issues that seem to hold them together. This led me to group the studies into three broad categories based on the conceptual background or interests of the researchers. These categories are not sharply defined. They represent approaches or perspectives rather than theories, and many of the studies included in one category have elements in common with studies included in one of the other categories. This is partly because many of the researchers (such as Wells, 1994) have tried to take a multi-disciplinary approach, incorporating insights from several disciplines into their studies.

The first category includes those studies that appear to be primarily psychological in their orientation. Learning and thinking are incorporated into a broad concept of cognition, and students are seen as creating or constructing their own knowledge and skills. The second category contains those studies that are primarily sociocultural in their orientation. Learning and thinking are seen as social processes occurring in social contexts, between rather than within individuals. Students progress through a process of apprenticeship within significant social groups. In the third category there are those studies that have a primarily language or sociolinguistic orientation. In these studies, the language of the classroom is both the content and the medium of learning and thinking. What students acquire are the linguistic 'genres' of the disciplines. These genres contain the concepts and ways of perceiving and thinking that characterise the disciplines.

While each of these three broad types of studies contributes something different to our understanding of students' classroom experience, they are more than just complementary perspectives on the same processes. They challenge and compete with each other over a number of central issues. As I worked to bring the studies together and find common themes I became increasingly aware that the differences between the studies occurred around these central is-

sues. They concern the nature of mind and of the processes of the mind. They bring into question the way we have traditionally described and understood the changes that education is supposed to produce in students.

Beneath a diversity of different perspectives and methods of analysis, I have become aware that a paradigm shift is occurring that is as significant as any that has occurred in classroom research. The nature of the new paradigm is not yet clear. The debate is still in progress and radical ideas that challenge the basis of our thinking are being proposed alongside minor modifications to familiar and accepted ideas.

The purpose of this chapter is to inform the reader about the nature of the current debate. This is done in the first three sections of the chapter by describing the three different approaches to understanding student cognition in the classroom. In so doing I become involved in the debate myself. In the fourth section of the chapter I examine the major points of conflict between the three approaches. These concern the existence of mind and the processes by which students learn from classroom experience. I then describe, using data from our own studies, a new perspective on classroom learning and thinking that incorporates the currently conflicting perspectives.

Throughout this chapter I have tried to keep the discussion in touch with the realities of student classroom experience. To do this I have made use, wherever possible, of examples of classroom observations, transcripts and interviews. Most of these come from studies that I have undertaken with Adrienne Alton-Lee (Alton-Lee & Nuthall, 1992; Alton-Lee, Nuthall, & Patrick, 1993; Nuthall & Alton-Lee, 1993). I am aware that extensive use of classroom observational data is unusual in a handbook chapter of this kind, but I hope it will constantly remind the reader of two things. First, the concepts and ideas that are debated in this chapter are supposed to provide insights and understanding of students' classroom experience. Second, it is a major strength of most of the research referred to in this article that it has been based in classrooms and can, without difficulty, be referenced back to its original classroom context.

THE COGNITIVE CONSTRUCTIVIST PERSPECTIVE

The studies that share the greatest continuity with earlier research on student thinking and learning in the classroom are those studies that have a broadly defined 'cognitive' perspective on student experience. With the development of cognitive science and of the concept of 'cognition' as a way of understanding all mental processes, the careful distinctions that used to be made between concepts such as learning, thinking, problem solving, and remembering, are no longer tenable. As a consequence, it no longer makes sense to talk of knowledge simply as a behavioural response or as a kind of substance that is transferred from

the mind of the teacher, or the page of the textbook, to the mind of the student. Instead, it is now commonly accepted that knowledge is a product of the ways in which the student's mind is engaged by the activities and resources of the classroom. Recent research studies on teaching and learning in science education (Carey, 1986; Driver, Asoko, Leach, Mortimar, & Scott, 1994; Magnusson, Boyle, & Templin, 1994), in mathematics education (Brown, 1993; Carpenter, Fennema, & Romberg, 1993; Cobb, 1994; Ernest, 1989), and in social studies education (Brophy & Alleman, 1992; Gregg & Leinhardt, 1994) have increasingly been based on the view that students construct their own knowledge as they engage in the processes of interpreting and making sense of their classroom experience. Learning is seen as the conceptual restructuring that results from this cognitive processing.

As a consequence of this view, it is no longer possible to make the assumption that there can be a direct link between teaching and learning. The way that tasks are structured, the questions that teachers ask, the examples that students practice, can only have indirect effects on student learning (Hiebert & Wearne, 1993). As students encounter new experiences, their minds construct representations of those experiences that are structured by their own previous knowledge and beliefs. These individually constructed representations interact with each other in the production of new knowledge and beliefs.

How this process works can be illustrated with an example from one of our studies. Kim was a third-grade student we observed in a class that was studying a social studies unit on England in the Middle Ages. The concept of a 'charter' as a social contract was a concept that came up several times during the unit. The teacher expected the students to learn about a charter although she did not discuss it directly.

Our observations showed that Kim came across references to a charter on three occasions during the unit. First, he read a work sheet (supplied by the teacher) that described the occasion when the English barons forced King John to sign the Magna Carta. This work sheet described the Magna Carta as a 'great charter' that 'sets out all the rights of free men.'

Three days later the teacher conducted a class discussion about life in medieval towns. The teacher summarised the discussion by writing a set of sentences on the blackboard. These included 'The marketplace was in the centre of town. People bought and sold goods there, the town crier made announcements, and it was a place where criminals were punished. A charter was a written promise giving the town its freedom.' Along with the other students, Kim copied the sentences into his project book. The teacher also gave each student an outline picture of the central square of a medieval town with instructions to colour it and paste it into their project book alongside the sentences. This picture showed a marketplace at a cross roads, with shops, various people and animals, and a

person throwing objects at a man locked into the stocks. Kim coloured his picture and pasted it into his project book.

Each morning during the unit, the teacher gave the students a list of spelling sentences containing key words related to the content of the unit. The students were required to copy these sentences into their project books and learn to spell the relevant key words. Two days after the previous experience, the teacher included a sentence about a charter in the morning spelling activity. On this morning, the teacher put a set of sentences on the blackboard that related to the previous class discussion of medieval towns. In each sentence the key word had been omitted and the students were expected to identify this key word and learn to spell it as part of their homework. Before beginning the task the teacher discussed the sentences with the class.

- Student: (reading sentence from blackboard) 'A written promise called a something showed that the town had been given its freedom.'
 [Student knocks on door of classroom, enters to find out the number of students who needed to order food for lunch.]
- Teacher: What was it called? Celia?
- Celia: Charter?
- Teacher: Right. [To lunch-order student] Are you coming with the charter?
- Lunch-order Student: Any lunch orders? [Students indicate orders.]
- Teacher: Right. Good girl. I wonder if anyone can tell me what the root word is for charter? Bev?
- Bev: Chart.
- Teacher: Right. Er. Chart - er ...

This discussion continued for the other sentences about the mayors and market places of medieval towns. Later Kim wrote these sentences in his spelling book.

This was the last of the three occasions when Kim experienced anything related to the concept of a charter during the unit. When we interviewed Kim about two weeks after the unit, he described a charter in the following way.

- Kim: Charters. I think it was, showed people directions for moving about the towns, 'cause there was charters in the middle where the market was, I think.
- Interviewer: Describe one to me ... anything you can tell me will help.
- Kim: Um, I can remember a person in the middle of the road with a scroll.
- Interviewer: Right.