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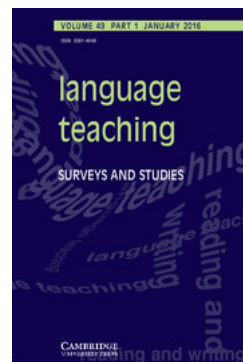
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The hidden side of the work: Teacher knowledge and learning to teach. A perspective from north American educational research on teacher education in English language teaching¹

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This paper argues that teachers' mental lives represent the 'hidden side' of teaching. It examines how teacher learning and teacher knowledge, as central attributes of those mental lives, have been conceptualized and studied since 1975 and traces connections to similar work in English language teaching (ELT)². While the majority of literature reviewed is drawn from the north American perspective, parallels are sketched in some of the emerging research in ELT teacher education. The analysis examines four broad families of issues: how teachers learn content and teaching practices, how teachers' mental processes are conceived, the role of prior knowledge in learning to teach, and the role of social and institutional context. Taken together, research in these areas suggests implications for the design and practice of teacher training and professional development in Second language teacher education.

I. Introduction

If you read the popular press or watch the media, it is striking to see how many people seem to have opinions about how teaching should be done and how teachers should be prepared. Arguably more than any other aspect of education, the preparation of teachers is largely animated by popular perception and belief. Moves to improve such professional preparation often seem to be based more on fad or opinion than on any solid research-based understanding how the work of teaching is actually done. Unlike other forms of professional work such as law or medicine, which define both the knowledge-base of the profession and the processes through which people gain

access to that knowledge-base (Starr 1982), teaching remains populist to its core (Labaree 1992). The knowledge-base is largely drawn from other disciplines, and not from the work of teaching itself (Shulman 1988). This paper works against that popular assumption by reviewing the emerging research base in general education on learning to teach. The aim is to advance the basic argument that teachers' mental lives represent the hidden side of teaching. I examine how teacher learning and teacher knowledge, as central attributes of those mental lives, have been conceptualized and studied since 1975 and I trace connections to similar work in English language teaching. I argue that teacher learning is the core activity of teacher education and therefore that any improvements in the professional preparation of teachers, including those who teach English and other second languages, need to be informed by this research.

To explore this idea of the hidden side of teaching, the argument examines two main socio-cognitive processes. One involves the developmental question of how individuals learn to teach; the other involves the epistemological question of how teachers know what they know to do what they do. Thus the former question examines what is known as **teacher learning** (Kennedy 1991), while the latter probes what is termed **teacher knowledge** (Ball 2000). Clearly these two areas of research are interrelated and inform one another. In fact, one might well argue that it is difficult to conceptualize how teachers learn without some notion of what it is they are learning; thus that the process and its focus or object are mutually defining (Darling-Hammond & Sykes 2000).

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² In this paper, I use the phrase 'English language teaching,' or (ELT), to refer to the teaching of English as a second, additional, or foreign language, known in the US as TESOL. I recognize that the phrase ELT is a bit problematic in that in the United States it can be taken to refer to English as mother tongue or first language instruction (language arts), while in Europe it would seem to be more accurately applied in this case.

In a sense then, the paper is a sort of conversation. One side draws on developments in the study of teacher learning and teacher knowledge in general educational research, primarily in the north American context. The other side of the conversation counterposes samples of parallel concerns in the field of English language teaching (ELT). Like any undertaking of this kind, which seeks to elaborate relationships among various types of research and thinking and to draw connections, there are bound to be shortcomings. Some readers may find errors of omission, work that they feel should have been included. Others may question the specificity of focus, wondering about larger trends in social history and political analysis that clearly shape education but that are not mentioned here. In spite of these concerns, I hope that the conversation developed here between a set of concerns in general education research and parallel issues in ELT teacher education will benefit both areas of work.

The starting point for this conversation reaches back to when the fact that teachers' mental activity might shape their classroom practice was not taken as a given. In fact, it was only in 1977, in an article in the *Cambridge Journal of Education* titled 'Decision and perception: New constructs for research on teaching effects', that Walberg coined the phrase 'teachers' mental lives'. In writing about teachers' decision-making and perceptions of teaching and learning, he opened up the broad, then uncharted, domain of teacher thinking in which these constructs might be found. A quarter of a century later, however, the political and social discourse about education in the media and among the general public continues to concentrate on the publicly accessible, behavioural aspects of teaching and to overlook the existence – let alone the critical importance – of teacher thinking and 'teachers' mental lives' in shaping effective teaching and learning.

This paper takes this notion of 'teachers' mental lives' as a starting point for an analysis of teacher learning. It examines how notions of thinking and learning have evolved through research over the last quarter of a century. The analysis begins by making a case for the 1970s as a starting point for this review. The argument itself is then organized around four major themes (in bold). The first theme, **how teachers learn content and teaching practices**, examines the definition of the teacher learning process itself and how understanding of the 'what' and 'how' of that learning process has evolved. The second theme addresses the notion of thought in teachers' work and **how teachers' mental processes are conceived**. The third theme, **the role of prior knowledge**, probes what teachers bring to the learning process. And the fourth theme, **the role of social and institutional context in learning to teach**, examines how setting in both a social and physical sense shapes how teachers learn and what they know. The final section outlines the implications of these four themes for second language teacher education.

II. A starting point

Any endeavor of this nature has to establish a logical starting point. To some degree, that starting point will always be arbitrary; however, there should be some declared logic to it. In this review, I argue for the decade of the 1970s as an appropriate marker since it flagged a critical turning point in how teachers were viewed in the research literature. In many ways, this period marked a shift in the plate tectonics of educational research and policy and how teaching, learning, and schools were conceived in the United States and in the United Kingdom. In the United States, for example, several national reports led to increasing interest and concern over school effectiveness and how teaching could be improved (e.g., NIE 1975). Against what had been the predominant paradigm of process-product research in the study of education (Dunkin & Biddle 1974), many began to question whether the complexity of teaching and learning could be understood from a behavioural standpoint alone and whether the core notion of teaching as transmission was a workable one.

When couched within a transmission model, the process-product paradigm examined teaching in terms of the learning outcomes it produced. Process-product studies concentrated on the link, which was often assumed to be causal, between the teacher's actions and the students' mental processes. As a classic statement of this view put it:

The assumption was made that differences among teachers in how they organize instruction, in the methods and materials they use, and in how they interact with pupils would have different effects on how much children learned... (McDonald & Elias 1976, quoted in Shulman 1986, 10)

In process-product research, the aim was to understand how teachers' actions led – or did not lead – to student learning. Studies of patterns in classroom questioning provide a clear instance of such research (see Rowe 1974). 'Wait time' research led to important insights into how timing and the complexity of teacher questions influenced student responses. However, as Carlsen (1991) points out in his review of this research, the role of the teacher's thinking and her mental processes in such behaviours was notably absent. Further, Carlsen argues that when wait time research expanded to include examination of why the teacher posed the questions she did, why she addressed particular students, and how the questions fit within the flow of the lesson and curriculum, a more complex and textured picture emerged.

The move towards more qualitative or hermeneutic studies of teaching and learning, studies that examined how the teacher's mental processes might shape her actions in teaching, depended on several crucial redefinitions. One entailed a shift in how teachers were viewed sociopolitically, that they, and not simply their behaviours in classrooms, were

defined as central in teaching. In this light, for example, it is perhaps significant that a leading book that helped to popularize this embedded view of teachers' work was Sylvia Ashton-Warner's *Teacher*, first published in 1979. The second major shift, which is perhaps more important to this review, required a conceptual and research agenda that would define 'teachers' mental lives'. In a sense, the central question became of what are these lives comprised?

Four publications provided useful markers of the initiation of this focus on teachers' mental lives. Two high-profile research reports, one which appeared in the United States in 1975 from the National Institutes of Education (NIE 1975) and the other released the same year in England by the Social Sciences Research Council (Sutcliffe 1977) both argued for understanding teaching through the lens of what was called 'clinical decision making'. They argued for the notion of 'decision' as a way to elaborate, and even in a sense to quantify, teachers' mental lives, a point I will return to below. Two books also appeared in the same period that were to become highly influential in education. In 1968, Philip Jackson published *Life in classrooms*, and in 1975 *Schoolteacher: a sociological study*, Dan Lortie's path-breaking study of teachers' work, was released. Both writers argued for re-centring educational research on teachers' experiences in the classroom. Lortie made the case in his Preface:

It is widely conceded that the core transactions of formal education take place where teachers and students meet. Almost every school practitioner is or was a classroom teacher; teaching is the root status of educational practice. ... 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 schools – are rare. [emphasis added] (1975, vii)

These publications were examples of the public signposts of a shifting definition of teachers' work at least within the educational research community. The focus was moving from teachers' behaviours towards an examination of their thinking and experience. This review centres, then, on the question of how this view of teachers and teaching has evolved since the mid 1970s. Using the organizing metaphor of what Walberg (1977) called 'teachers' mental lives,' the review examines the major stages in this journey that has combined pursuit of professional epistemology with the establishment of psychologically complex identity. How have we come to understand the learning and the knowledge that go into making teachers' mental lives? And what might such inquiries suggest for teacher education in Second language education?

III. Organizing the review: Four themes and three time periods

To examine these questions, this analysis is organized around four themes that together map out the development of such research:

- How do teachers learn **content and teaching practices**?
- How are **teachers' mental processes** conceived?
- What is **the role of prior knowledge** in learning to teach?
- What is **the role of social and institutional context** in learning to teach?

Like any set of a priori organizers, they may be somewhat arbitrary. However, I would argue that these themes make certain intuitive sense in that each one builds on the one that precedes it to evolve a more complex, socially and institutionally situated view of teacher learning and knowledge. The first theme begins with the content and teaching practices; these speak to the objects of teacher learning and thinking: the what and the how in learning to teach. Then, given these objects, the second theme addresses how teacher thinking itself is defined, and how the thought processes involved are conceived. This discussion leads to the third theme, and the question of how teachers' past experiences interacts with their present thinking, or the role of prior knowledge. The fourth theme examines how context – in a social and physical sense – shapes teachers' learning and their thinking. While other analyses might map out the research landscape differently, these four themes suggest a logical way to organize this burgeoning literature in response to the overarching question: How has our view of teacher learning and knowledge evolved in the last quarter century and what implications does that have for second teacher education?

In focusing on work since the mid 1970s, I have subdivided the period into three broad time frames: work leading up to 1975, which I term 'the decade of change' (1980–1990), and then 'the decade of consolidation' (1990–2000). Together these three time periods and the four themes create a matrix that can serve to organize the discussion. (See p. 4.)

Following this review, the concluding section of the paper addresses how this research might shape work in Second language teacher education. Ultimately this paper has the pragmatic intent of making suggestions to improve the practices of teacher education based on what we know about how teachers learn and how their knowledge is formed. Thus in conclusion, I comment on the implications of these themes for how we understand the role and potential impacts of teacher education on learning to teach.

IV. The *status quo ante* – The period leading up to the mid 1970s

To put the matter perhaps overly simply, prior to the mid 1970s, teachers were generally not seen as having 'mental lives' to use Walberg's phrase. Policy and research in education drew strongly on the process-product paradigm, as outlined in section II. Content was separated from teaching processes so that the

Shifting frames in understanding: 25 years of research on learning to teach

		←	DECADES	→
		Leading up to 1975	The decade of change (1980–1990)	The decade of consolidation (1990–2000)
T	Content/ Teaching practices			
H				
E	Thought processes			
M	Prior knowledge			
E	Context: classroom/ school/community			
S				

what and the how of teaching fell into neat, hermetic categories, each with its own set of discipline-derived definitions. Learning to teach involved mastering the specific content one was to teach and separately mastering methodologies for conveying that content to learners. These methodologies were often bolstered by theories of learning. The field of English and foreign language teaching offers us a clear picture of the evolution and continuity of this view. In the case of this field, the form of language as the content of second/foreign language instruction has been defined by applied linguistics, while the notion of cultural content and knowledge has largely replaced literature in defining the ‘content’ of language use in classroom settings (viz. Kramsch & Kramsch 2000). Likewise, the currency of teaching methodologies has undergone periodic shifts in this century as definitions of ‘good methodological practice’ in English and foreign language teaching have moved from grammar translation, to the direct method, to audiolingualism, to communicative language teaching (e.g., Richards & Rodgers 2000). Throughout this evolution, cognitive psychology, and more recently second language acquisition, have provided theoretical and empirical input into the direction of these methodological movements (viz. Byrnes 2000).

In English and foreign language teaching, learning to teach has been largely viewed as a matter of mastering content on the linguistic and meta-linguistic levels, practising classroom methodologies and technique, and learning theoretical rationales for them. This view, which derives from the process-product paradigm (see Chaudron 1988), is supported by a network of key assumptions about how to organize and teach language as knowledge. The structure of the university, for example, organizes knowledge according to academic disciplines that in turn have given rise to the various subject-matters now used in

professional preparation (Freeman 1998; Shulman 1988). Similarly, the professionalization of teaching has needed to define a knowledge-base upon which to predicate policy actions such as teacher licensure for example. These efforts have required some sort of fixed categories of content and process by which to assess what teachers know and can do (McKeon 2001; Labaree 1992).

These two epistemological forces of university structure and professionalization blend with a third force, the social organization in schools, to further shape the structure of teachers’ professional knowledge. Since the early 1900s, schooling in industrialized societies has increasingly drawn distinctions between elementary and secondary teaching (Tyack 1974). Elementary teachers are responsible for teaching most subjects to one group of learners; they are in effect seen as teaching children first and content second. In secondary schools, the reverse is true. Teachers are usually organized into departments – math, history, natural sciences, foreign languages – while students circulate from classroom to laboratory to study with them (Tyack & Tobin 1994). Thus at the secondary level, the subject matter is the primary organizer in the social organization of schools.

These various forces of delivery and use of knowledge – the structure of the university, the professionalization of teaching, and the social organization of schooling, along with others – underscore the pervasiveness of the view in education in which content and process are treated as separate and combinatory elements in learning to teach. By-in-large, content is seen as a fixed, even permanent set of concepts to be learned and mastered by the teacher-to-be. In contrast, teaching processes – such as methods, activities, and techniques – are seen as the packaging for content. These processes are the ways in which ‘good’ teachers adjust the content for learners. ‘Good’ teaching conveys the same content to diverse

learners such that, should the learners not learn, the shortcoming is generally seen as lying in the teaching processes and, by extension, in the teacher's competence. There is thus an on-going and dynamic tension between the fixed value of the content knowledge and the local, contextual adjustment of teaching practices that the teacher must learn to navigate.

In the research and thinking leading up to the mid 1970s, the teacher, then, was viewed as a doer, as an implementer of other people's ideas – about curriculum, methodology, and even about how students learned. If there was no 'mental life,' then there could be few – if any – thought processes to support this doing of teaching. Further, in keeping with this view, new teachers were seen to enter professional training *tabula rasa*, with no prior knowledge of teaching or the teacher's role. Background, experience, and social context were all overlooked as potential influences on how new teachers formed knowledge in their professional education. It followed, then, that context was seen as a backdrop. Classrooms and schools were simply settings in which teachers implemented the thinking of others. New teachers 'put their training into practice' in the classroom. At the chalkface, experienced teachers implemented curricula and teaching methods so as to enhance student learning.

Jackson's study of elementary schools, *Life in classrooms*, published in 1968³, offers a glimpse of how teacher thinking was viewed in the period leading up to 1975. His description echoes the norms of the day, norms that projected assumptions about stability, familiarity and predictability on to classroom life. Jackson (1968, 7) observed, 'Not only is the classroom a relatively stable physical environment, it also provides a fairly constant social context. Behind the same old desks sit the same old students, in front of the familiar blackboard stands the familiar teacher'. His comment captures the dilemma of process-product research in studying and understanding teachers and teaching from the outside in. Everything external – the classroom, the teacher's and students' actions – all look very familiar. There appears to be great regularity in the publicly visible world of teaching. Perhaps for that reason, the teacher's internal mental world was assumed to be minimally sophisticated as well. Noting the 'absence of technical terms in teachers' talk', Jackson (1968, 144) commented 'Not only do teachers avoid elaborate words, they also seem to shun elaborate ideas'.

V. The decade of change – 1980–1990

While the 1970s marked a turning point in how research conceived of teachers and their mental lives,

³ While published in 1968, the full influence of Jackson's book took root in the early 1970s; hence its inclusion in the argument for the 1970s as the turning point in conceptualizing teachers' work.

the years from 1980 to 1990 marked a full decade of change and reconceptualization. Concepts that are now taken for granted – such as teaching as decision-making or the role of beliefs and assumptions in teaching, the notions of the 'hidden' pedagogy and curriculum or the 'apprenticeship of observation', of 'pedagogical content knowledge' – were all spawned and took root during this time. The challenge of the decade was in fact twofold: teachers' work and their mental lives had to be repositioned in the study of teaching and, simultaneously, different research methodologies needed to evolve and be adopted to do so. In other words, it was a challenge of *where* to look as well as one of *how* to look.

In the proceedings of the first meeting of the International Study Association of Teacher Thinking, held in 1983, Hawkes and Olson (1984, 1) wrote with great bravado and excitement of this time of reconceptualization:

Looking from a teacher-thinking perspective at teaching and learning, one is not so much striving for the disclosure of the effective teacher, but for the explanation and understanding of teaching processes as they are. After all, it is the teacher's subjective school-related knowledge which determines for the most part what happens in the classroom; whether the teacher can articulate her/his knowledge or not. [original emphasis]

Comparing this new interpretative approach to its antecedents in process-product research, they concluded, 'Instead of reducing the complexities of teaching-learning situations to a few manageable research variables, one tries to find out how teachers cope with these complexities' (1984, 1). Studying teachers' 'subjective school-related knowledge' required some sort of unit of analysis, which became the notion of decisions.

The central, and arguably the most influential, concept to emerge in the study of teacher thinking in the 1970s was that of decision-making (Shavelson & Stern 1981). Interestingly, the notion of pedagogical decisions seems to have found its way into educational research from work on physicians' decision-making in clinical settings (see NIE 1975). While equating the mental work of doctoring with that of teaching has definite political overtones (Labaree 1982), defining teachers' mental lives in terms of decisions they make created an easy, almost quasi-behavioural, unit of analysis that could be applied across multiple classroom settings, content areas, and levels of teaching expertise. Perhaps the first major appearance of the concept in ELT came in Devon Woods' work (Woods 1989). Connecting decision-making to other mental activity, Johnson (1995, 33) describes 'teachers' theoretical beliefs ... as filters through [which they] make instructional judgments and decisions'. Further in her book, *Understanding language teaching: Reasoning in action*, Johnson (1999) extends this analysis to provide a very useful overview of how the concept of deci-

sion-making has developed in ELT and been linked to other ideas such as pedagogical judgments, beliefs, and knowledge structures.

While throughout the 1980s teachers' decision-making came to provide a discrete unit of analysis, the study of teachers' mental lives still required a broader shift in the educational research paradigm. The new interpretative paradigm, however, required new skills and theory. These were largely imported from field work in anthropology and sociology with the widespread development of ethnographic studies in education as, for example, with Shirley Brice Heath's 1983 pivotal study, *Ways with words: Language in communities and classrooms*. This grounded, field-based, interpretative work revealed that content and teaching processes were far more integrated than had been heretofore accepted. The integration worked on two levels. There was what might be called an 'internal integration' in which content and teaching process were seen as intimately connected, and there was likewise an 'external integration' of content and teaching process within the social fabric of 'communities and classrooms'. Studies of this internal integration of content and teaching process generally focused, quite logically, on the role of language as the glue in instruction, as in Edwards and Furlong's study *The language of teaching: Meaning in classroom interaction* (1978) or Mehan's work with Cazden in *Learning lessons* (1979). External integration looked at how classroom practices linked to, or were disconnected from, the ways in which such skills or knowledge worked in the community, as with Heath's study of school-community links in literacy practices, for example.

The notion of this internal integration of content and teaching processes via language of instruction fed the evolution of two constructs: Shulman's (1987) proposal of 'pedagogical content knowledge' and Clandinin's (1985) notion of teachers' 'images'. Pedagogical content knowledge, or PCK as it came to be known as, argued that teachers operate from a form of knowledge that derives from neither discipline-based content nor training-based pedagogy, but is a hybrid of the two. Grossman, in her case study of a high school English teacher titled, *The making of a teacher*, explained PCK in the following way: 'Teachers must draw upon both their knowledge of subject matter to select appropriate topics and their knowledge of students' prior knowledge and conceptions to formulate appropriate and provocative representations of the content to be learned' (1990, 8). The place of language in setting up and working with these representations is clearly central. The teacher engages her students, and the students engage one another, with the content of the lesson through language. Thus the teacher's PCK on which that engagement is based, or perhaps which that engagement expresses in practice, is a highly linguistic undertaking. When applied to language as subject-matter however, PCK becomes a messy and possibly

unworkable concept. Using Grossman's definition, for instance, teachers' knowledge of subject-matter would probably be defined in linguistic terms, while students' prior knowledge and conceptions of language likely stem from their first language. Further, teacher and student conceptions meet in the second language classroom, through a mixture of first and second languages, thus setting up at least three, potentially conflicting, levels of representation: the teacher's linguistic knowledge, the students' first language background, and the classroom language interactions.

Arguing for a distinct form of teachers' knowledge similar to PCK, Elbaz (1983) and Clandinin (1985) said that teachers work from what they called 'personal, practical knowledge' in teaching. Clandinin defined such knowledge as 'imbued with all the experiences that make up a person's being... [It is] derived from, and understood in terms of, a person's experiential history, both personal and professional' (1985, 362). Clandinin and her colleagues claimed that teachers enact their 'personal, practical knowledge' as narrative 'images' in classroom teaching; these images integrate personal history, present activity, and future goals into one seamless continuity.

Interestingly, about five years later, when such research was fully underway, Shulman chaired a colloquium at the 1992 American Educational Research Association titled, 'PCK – A concept that is usefully wrong?' In reviewing the veritable cottage industry of research spawned by the concept, the session addressed the fact that, while PCK had helped to refocus both research and teacher education on the kinds of knowledge and know-how that teachers actually use in their classroom practices, as an epistemological concept it was seriously flawed. Nonetheless progress had been made. It had become accepted that teaching involved the teacher in complex thought processes. In contrast to the teacher as doer, the teacher was now largely seen as 'knowing what to do' (Freeman 1996a). This view rested on a complicated mental life, the core of which was variously described as 'decision-making' (Shulman and Elstein 1975), as beliefs, principles, and assumptions (Parajes 1992), or as 'personal, practical knowledge' (Elbaz 1983).

This complexification of thought was accompanied by a reassessment of the role of prior knowledge in teacher learning. If, as Clandinin had said, teachers' knowledge encompassed the sum total of their personal and professional experiences, then clearly that background must somehow interact with – and potentially shape – any new learning teachers might do. Writing in 1991, at the end of this decade of change, Kennedy (1991, 2) argued the issue quite succinctly: 'Teachers, like other learners, interpret new content through their existing understandings, and modify and reinterpret new ideas on the basis of what they already know and believe'. Kennedy was

referring here to the findings of Teacher Education and Learning to Teach Studies (TELT), a massive set of longitudinal examinations that probed the influences of teacher education on learning to teach. TELT was conducted in the late 1980s by the U.S. National Center for Research on Teacher Learning at Michigan State University, which Kennedy directed.

Two concepts, perhaps more than others, helped to direct this thinking about how teachers' prior knowledge shapes their professional learning. The first came from seminal thinker, educational sociologist Daniel Lortie in his notion of the 'apprenticeship of observation'. Here Lortie referred to the 13 or so years that individuals spend observing teachers and participating in classrooms as students (Lortie 1975). Researching this concept in English and foreign language teaching two decades later, in 1995, Bailey and her colleagues found that such experiences created what they called a 'teacher factor', which they described as 'the 'good' and 'bad' teaching models [which] were evident in our histories'. 'It became clear,' they continued, 'that the teacher factor in general was more important to us as learners than were the materials or methodology per se' (Bailey et al. 1996, 15).

The second concept was Denscombe's notion of 'hidden pedagogy' that he described as teachers' implicit theories about 'what the job [of teaching] is all about' (1982, 251). This pedagogy, Denscombe contended, may do more than any professional preparation to shape how individuals actually teach. Thus the role of prior knowledge was catapulted from the insignificance of a *tabula rasa* view to the centrality of an internal guiding force or 'hidden pedagogy'. It is interesting to note a further connection here. Denscombe traced the genesis of his thinking about 'hidden pedagogy' back to the notion of a 'hidden curriculum' in Jackson's *Life in classrooms*. Jackson had argued that this 'hidden curriculum' accounts for the replication of socialization in schools by placing demands on students and teachers that may conflict with the demands of the explicit curriculum.

While the notion of prior knowledge created a history to the teacher's present thinking and practice, projecting professional learning throughout a teacher's career gave rise to the concept of developing expertise in teaching. Prior to the work of Lortie (1975), the notion of teachers' professional life spans had not been a major concern or focus of research. In terms of professional expertise, major research and conceptualizations by Berliner in the mid-1980s (1986) and others served to establish the concept of professional development over time, throughout a teacher's career. This work pointed to definite stages in the development of knowledge and practice (Genburg 1992; Tsui forthcoming), that at different stages in their careers, teachers have different professional interests and concerns. For example, novice

teachers, defined as those with less than three years of classroom experience, tended to be concerned with carrying out their images of teaching by managing the classroom and controlling students (Berliner 1986). In contrast, expert teachers, defined in the research as those with five years or more in the classroom, tended to concern themselves with the purposes and objectives of their teaching and how they may be accomplishing them.

It is perhaps inevitable that this complicated texture of time and activity – evidenced in constructs such as 'hidden pedagogy or curriculum', the 'apprenticeship of observation', teachers' 'personal, practical knowledge' or narrative 'images', or PCK – implicated a more central role for context in teacher learning and professional knowledge. These constructs all suggest that personal and social history, present social relationships, and future social perceptions are interwoven in the fabric of teachers' mental lives. Together these forces provide a sort of core that threads itself through the activity of teaching. Context thus becomes more than the physical space of the classroom and school in which teachers practise teaching skills. It assumes a virtual dimension through the socializing power of the teacher's past and present experiences and communities. From this perspective, the perceived distance between the sometimes ivory tower worlds of professional training and the nitty gritty of the classroom – the old 'Forget what you learned on that training course, this is how we do things here...' – is recast. The theory-practice gap is no longer an issue of lack of relevance or of faulty transfer of skills; rather it is one of connecting and integrating the social contexts of professional education with those of the classroom and the school.

The 1980s were, then, a very rich and productive time for the study of teacher learning. In her article, 'Research on teacher's knowledge: The evolution of a discourse', published in 1991, Elbaz summarized this decade of change, making the case that research on teacher knowledge had evolved into the three broad areas of inquiry: 'teacher thinking, the culture of teaching, and the personal, practical knowledge of teachers' (Elbaz 1991, 1). While these sub-fields might seem to have introduced greater complexity, the aim of the enterprise itself – to explore and document teachers' mental lives – had been sharpened. In summarizing that aim, Elbaz (1991, 10) returned to its roots when she wrote:

Students of teacher thinking have all been concerned to redress an imbalance which had in the past given us knowledge of teaching from the outside only; many have been committed to return to teachers the right to speak for and about teaching.

To examine how this 'right' has evolved, we turn now to the period that spans 1990 to 2000, which is represented in the third and final column of the matrix.

VI. The Decade of Consolidation – 1990–2000

In comparison to the 1980s, which had marked a decade of fundamental change in how teacher learning was defined and understood, the ten-year period from 1990 to 2000 has consolidated and deepened that understanding. The move away from the process-product paradigm, which had begun in 1975, became more-or-less complete. The notion of teachers' mental lives, and indeed the concept of teacher learning itself, was firmly established as a matter of public policy. For example, in the United States, a leading national commission argued: 'The teacher must remain the key. Debates over educational policy are moot if the primary agents of instruction are incapable of performing their functions well' (NCTAF 1996, 5). Similar positions were articulated in policy documents of other national governments during this period (e.g., South Africa: NDOE 1996; Brazil: MEC 1996).

Thus there seemed to be little disagreement about the central role that teachers must play in understanding teaching, whether for the purposes of research or of improvement and reform. The notion that teachers possess access to unique knowledge about teaching became increasingly widespread. In English and foreign language teaching, this idea of examining teaching in its own right came into its own in this decade from 1990 to 2000. In retrospect, the trajectory was a logical one. Throughout the 1980s, there had been increasing interest in the nature of teacher learning in the field of English language teaching (ELT), concerns that took root in second language teacher education on the one hand and in teacher development on the other.

Two important markers of that movement to examine second teacher learning in Second language teacher education involved professional associations, the International Association of Teachers of English as a Foreign Language (IATEFL) and Teachers of English to Speakers of Other Languages (TESOL), and the publication of a collection of professional work on the topic. In the late 1980s the Teacher Development Special Interest Group (SIG) was organized within IATEFL, following by a couple of years the formation of a similar group, the Teacher Education Interest Section, within TESOL. Both groups flourished in the early 1990s, providing the first marker of the central interest in teacher learning. In its first newsletter published in 1986, the new IATEFL SIG outlined the following goal as a self-articulated commitment to teacher learning: 'To enable and encourage all categories of teacher to take more responsibility for professional and personal evolution throughout their careers'. This emic concern by teachers for their own professional learning and improvement was accompanied by a second marker which came in 1990, when Richards and Nunan

published their edited volume titled, *Second language teacher education*. In the Preface, the editors stated the purpose of the book as follows: 'The field of teacher education is a relatively under explored one in both second and foreign language teaching. The literature on teacher education in language teaching is slight compared with the literature on issues such as methods and techniques for classroom teaching' (Richards & Nunan 1990, xi).

An interesting complementarity of concern emerges when these two events are considered side-by-side. Elbaz might have argued that Richards and Nunan were seeking to provide 'knowledge of teaching from the outside', while the IATEFL Teacher Development SIG would encourage 'teachers to speak for and about teaching'. However, both efforts shared a common focus on teacher learning in English and foreign language teaching. For either undertaking, to explore teacher education or to promote teacher development, one would have to delve into the nature of teacher learning. Perhaps not coincidentally therefore, to frame and support such work in English and foreign language teaching, the profession has turned to parallel work in general education.

What has happened in this decade to promote this synthesis and consolidation? On a macro-level, research orientations had shifted and the interpretative paradigm moved towards a post-modern perspective that asserts that any knowledge depends on a plurality of views, reflects a relativity of position in establishing those views, and can be promoted or 'silenced' depending on how power is used. Johnston (1999, 261–262) offers a succinct summary of the key themes that make up this often thorny and complex term:

Within educational research, 'postmodernism' has concerned itself with the nature of power in educational institutions (an area in which it has been congruent with critical theory); with the struggle to hear diverse voices in the educational process, especially those of traditionally marginalized and disempowered groups; with the centrality of language (logocentrism) and the idea that all expression is simultaneously interpretation; with the death of the subject and the subsequent reappraisal of unitary and stable identities; and with the critique of previously unchallenged assumptions underlying educational practices.

For the field of English and foreign language teaching, postmodernist arguments can be disquieting ones. In comparing the itinerant, expatriate EFL teacher to a medieval paladin, Johnston observes: 'The laudable goal of teaching a language while learning about another culture at first sits uneasily, but inevitably, alongside the language teacher's implication in the hegemonic and predatory power relations between English-speaking and non-English speaking countries'. The field has, for example, generally treated English as the content of teaching and textbooks as fairly benign representations of that content. In this largely technicist approach, EFL teachers teach the language, while the learners

decide what they will do with it. Postmodernism calls that neutrality into question, however.

Given the postmodern frame, it is thus not surprising that our understanding of how content and teaching processes interrelate has changed as well. Challenging the separation of content and how it is taught, McDiarmid and his colleagues (1989) argued at the start of the decade for what they called 'subject-matter representation'. Subject-matter representation mediates between how the teacher conceives of, and represents, content to students and how they conceive of, and learn, that content. Clearly this concept, which is anchored in the logocentrism of postmodernism, is well suited to language as subject-matter and to English and foreign language teaching. Writing about the process of course design, Graves (2000, 43) describes a version of subject-matter representation this way:

When you think about the content of a course, you can think about both what students will learn and how they will learn it. For example ... in a writing course, the what and the how are intertwined. You may conceptualize the content in terms of types of writing they will learn, but learning how to produce those types of writing involves the actual process of writing.

In fact, concern for subject-matter representation, or redefining how content and teaching processes fit together in the language classroom, has been a central concern for English and foreign language teaching in this decade. Two prominent examples include the process syllabus (e.g., Breen & Littlejohn 2000)⁴ and learning styles (Oxford 1990), for example. Each of these concepts blends content and teaching process in versions of subject-matter representation in English and foreign language teaching. The process syllabus, for example, includes processes for obtaining and managing learners' input about the course content as part of the subject matter. Thus learners can, to various degrees, structure both what content they learn and how they learn it. In a similar vein, learning-styles pedagogy includes the learners' various ways of learning content as explicit and articulated parts of the course content. Thus in both instances, the what of instruction is expanded from language *per se* to encompass the how of learning the language.

With both the process syllabus and learning-styles pedagogy, as with work on subject-matter representation generally, the boundaries of content and teaching process become blurred. No longer are what and how seen as separable elements to be combined in classroom delivery. Further, concepts of personal, practical knowledge and PCK that evolved

during the 1980s created a new hybrid form of classroom knowledge on which to base teaching. However, subject-matter representation goes beyond this synthetic hybrid to confound the basic binary structure of content and process, creating a different perspective that has definite implications for educating language teachers.

In the postmodern worldview, little is fixed or permanent. For the teacher, thought processes depend on point of view, or position. Thinking reflects social identity – who you are, your background and experience, your purposes, and your social context. Researchers in this decade have referred to this relativity as 'positionality of knowing' (e.g., Britzman 1991; Belenky et al. 1986). In terms of English language teaching, Johnston details this positionality in terms of what he calls the 'marginality' of ESL/EFL as a 'postmodern profession'. He writes that ESL/EFL teaching is:

a marginal occupation ... in academic terms [because it occupies] an ill-defined place amidst linguistics, education, English, and a host of other disciplines such as psychology, sociology, and anthropology. In its daily practices, [ESL/EFL teaching] is conducted by definition at the meeting point between two or more cultures and owes its very existence to difference and to ongoing contact between cultural Others. (Johnston 1999, 276)

Within the postmodern frame, because thinking and knowledge are relative to the person, it follows that different people will think (and know) the same things differently. Thus, the argument goes, a teacher will think about and know her teaching and her classroom differently from a non-teacher who spends time there, regardless of the parity, care, and thoroughness that the outsider may invest in the research process. Part of the challenge is that knowledge in the classroom is widely networked; it brings together past experience and future goals within the context of present activity and interaction. This quality has been referred to as the narrative or storied character of teachers' knowledge (Carter 1993).

This blending past and present raises the issue of how prior knowledge fits into this new landscape. Previous views saw prior knowledge as what teachers knew before they entered professional training (as in pre-service teacher education PRESET) or the classroom. Thus prior knowledge was an entity that needed to be integrated into the teacher candidate's present thinking and knowledge. Under the influence of postmodernism, and the positionality of knowing, that view changed. In effect, prior knowledge – the past – becomes one more vantage point on current activity; it becomes one more position from which to know. In her work on classroom discourse, drawing on the work of Basil Bernstein and others in language education, Courtney Cazden (1988) made the point that there are two sets of context: the public contexts among teachers and students which shape classroom talk and who says what

⁴ While work on the process or procedural syllabus dates to the mid-1980s (e.g., Breen, 1984; Prabhu, 1987), it seems to have been more curricular in focus. It is interesting to note for this analysis its re-introduction and explicit connection to teachers' decision-making in Breen & Littlejohn (2000).

to whom and how, and there are also what Cazden referred to as the 'contexts of the mind'. These 'contexts of the mind' shape how interlocutors know what to say, what is acceptable or taboo, and so on. They provide the private interpretative maps from which individuals navigate the public interaction. Thus inappropriate language behaviour may well be a function of the speaker not having the appropriate 'context of the mind' for the public setting.

Clearly there is no single 'context of the mind'. These interpretative frames are multiple and overlapping. Bringing this work into teaching, as I have done, consider the following. In a class discussion for instance, a teenage student talks about an argument with his parents. The teacher can hear what he says within the 'context of the mind' of the teacher: She can listen for fluency and accuracy of expression and language mistakes. But she can simultaneously listen from the mental context of an adult or parent, hearing perhaps the other side of the argument. And she can listen from the mental context of a former teenager, hearing perhaps the injustice of the situation. These contexts are embedded within one another like so many boxes. Taken together, they create a complex interpretative frame through which the teacher makes sense of her work.

From a teacher-education standpoint therefore, the teacher learner's contexts of mind provide a meeting point between prior knowledge, as life history, background, social position, experience and so on, and the present experience and interaction of the teacher education activity or course. Thus, for example, a teacher-training course that emphasizes student-centred, communicative strategies may conflict with the prior knowledge and contexts of mind of teacher-participants from national settings and educational cultures that emphasize the central authority of the teacher. To address this dilemma, Bax (1997) and others have called for 'context-sensitive' teacher education practices that they define as 'involving trainees in ways that would ensure that the programme has as close a bearing as possible to their teaching concerns and contexts' (Bax 1997, 233). One might argue, however, that this type of mediation and adjustment between trainee and trainer happens anyway, all the time, and that context-sensitive strategies simply offer a means of trying to make visible and active a part of the teacher-education activity that is usually hidden and covert.

When teacher learning is seen as negotiating identity and positioning knowledge, the notion of context in its conventional sense disappears. Interaction is no longer considered central, with all the trappings that surround it labeled as 'context'. Rather there are different, embedded frames of meaning which provide interrelated 'texts' or sources of meaning. Each of these texts hinges on difference, providing a mildly or strongly contrasting source of interpretation. If we consider the previous example of the teacher and the

teenage student for example, having access to multiple ways of hearing the student's comments, on what basis will the teacher determine her response? She may hear the student as a teacher because the activity is prep for an oral exam. Or she may hear him as an adult, because he has not spoken up in class discussions before. She may actually do both and her public response will blend the two frames. And if a researcher were to observe the whole interaction and ask the teacher why she had responded as she did, her answer would no doubt take into account positionality and would come in part as a function of who the researcher was and the question that had been asked. Thus what had been called teacher 'decision-making' in the 1980s becomes a complex, contingent, and amorphous set of relationships among meaning, context of the mind, and public activity.

Pennycook (1999, 337) argues that teachers' responses to difference lie at the core of the transformative or 'critical' approaches to classroom teaching. He distinguishes between the first which 'hinges on whether teachers see their pedagogical goal primarily as giving marginalized students access to the mainstream ... or as trying to transform the mainstream by placing greater emphasis on inclusivity'. Pennycook refers to the first approach as creating 'access' and the second as creating 'transformation'. Interestingly, Johnston (1999) seems to be arguing that the EFL teacher is cast – or casts him or herself – as 'postmodern paladin' by seeking to create access for students to English language and associated culture(s). In drawing the parallel, he observes that 'While the paladins were not themselves colonizers or missionaries ... they acted as de facto representatives of colonizing powers such as church and nation' (Johnston 1999, 259). In contrast, Bax (1997) appears to favour Pennycook's transformative approach by arguing for greater inclusion of trainees' 'teaching concerns and contexts'.

It may be ironic that a decade of consolidation seems to have brought more complexity than clarity to our understanding of teacher learning. The world of research and practice was probably simpler and more ordered in good old days when public actions were what mattered and mental lives were less of a concern. Thus it is fair to ask what all this complexity has gained us. I would argue that there are at least three principal advantages. First, there are now more legitimate voices with access to and thus the possibility to transform the conversation about teaching and learning. 'To return to teachers the right to speak for and about teaching', as Elbaz put it in 1991, has brought teachers into the research process which is critical to professionalization. Second, those voices can raise issues of complexity and messiness in understanding teaching. It may have been easier to think of the world as flat, as we did in the 15th century, or the earth as the centre of the solar system, but the implicit simplicity of either holding did not make it so. The

same is the case with understanding teaching. While we might arrive at crudely accurate maps of teaching by studying it from the outside in, we will not grasp what is truly happening until the people who are doing it articulate what they understand about it.

Third, the consolidation has led and is leading to power-sharing amongst researchers, teachers, and teacher educators. The interaction of different types of knowledge – or of things known from various points of view – leads inevitably to issues of power and who is ‘right’. If, as I believe it will, the next step will involve a redefinition of what counts as knowledge in the study of teaching, we will have to move from the simple technicist answers of our current debates, to more complex and local responses. Evidently teachers can do the job of teaching perfectly well without going public about what they are thinking and what they know. The dilemma, then, is how to engage teachers in articulating and publicly representing the complexity of teacher learning (Freeman 1998).

VII. Some implications for teacher education

This review began with the question, how have we come to understand the learning and the knowledge that go into making teachers’ mental lives? In closing I turn to a brief examination of what the responses, charted over the last two decades of research in general education, may portend for the theory and practices of preparing teachers in Second language teacher education. These implications are organized into three central observations.

§ The aim of teacher education must be to understand experience.

The central challenge for teachers, like any of us, is to find meaning in our experience. If teachers’ mental lives are storied or narrative webs of past and present experience, if their knowledge is reflective of their position in the activity of teaching, then it makes sense that reflective practice must become a central pillar in teacher education. The role of external input – of theory, prescriptions, and the experiences of others – lies in how these can help the individual teacher to articulate her experience and thus make sense of her work. Teacher education must then serve two functions. It must teach the skills of reflectivity (Stanley 1998) and it must provide the discourse and vocabulary that can serve participants in renaming their experience (Freeman 1996b). We need to understand that articulation and reflection are reciprocal processes. One needs the words to talk about what one does, and in using those words one can see it more clearly. Articulation is not about words alone, however. Skills and activity likewise provide ways through which new teachers can articulate and enact their images of teaching.

§ Teacher education will need to organize and support new relationships between new and experienced teachers.

If knowledge in teaching belongs fundamentally to teachers, then it makes sense that teachers must be able to communicate what they know about their work to those who are learning it. A critical role of new teacher education designs will be to make that happen, through well-crafted mentoring programs and similar social arrangements that connect new and experienced teachers in learning teaching across a career span.

With regard to this notion of career spans, three points bear emphasizing. First, the notion that pre-service teacher education can fully equip a teacher for a career in the classroom is erroneous. This approach, which I have elsewhere referred to as ‘front-loading’ (Freeman 1994), assumes that all of what teachers need to know and be able to do can be addressed at the start of their careers through PRE-SET. However, this assumption and approach clearly runs contrary to what is known about the role of place and time in teacher education. If contexts for any learning are socially developed and situated, if teacher learners are bringing their ‘contexts of mind’ to their formal learning in teacher education, then it is clear that what is being learned challenges and transforms what is known over time. Otherwise teacher education could fully equip a first-year teacher with the knowledge and skills to last a career, an assumption that is as patently absurd as it is, unfortunately, still widespread in practice. Second, if teacher learning and expertise evolves in a broadly predictable and normative fashion over time, it is also clear that the ‘one-size-fits-all’ approach in INSET is equally inappropriate. Rather, it makes sense for in-service education to base offerings on choice rather than prescription and thus to present a variety of opportunities. Finally, it is important not to confuse the idea that teachers’ specific needs and interests may evolve over time with the fact that the fundamental impulse in teacher learning remains constant: namely, to find or establish meaning in their work.

§ In teacher education, context is everything.

The conventional notion of converting theory into practice on which most teacher education operates begs the question of context. This review has highlighted the changing view of context in research over the past 25 years. In research through the mid 1970s classrooms were seen primarily as sites of educational delivery. Because teachers’ practices were essentially defined as behaviour, context simply supplied places for that behaviour to unfold. During the 1980s, in the so-called decade of change, teachers’

practices were rendered more complex as they were situated in personal and institutional histories and seen as interactive (or dialogical) with others – students, parents and community members, and fellow teachers – in the settings in which they unfolded. Thus the notion of context moved from backdrop to interlocutor in the creation and use of teachers' knowledge. All of which raises the specific question in teacher education of what the role of schools can be in learning to teach. Teacher educators and researchers are now asking how schools as socio-cultural environments mediate and transform what and how teachers learn. How can these contexts be orchestrated to support the learning of new teachers and the transformation of experienced practitioners? Unfortunately, the vast majority of PRESET and INSET programs do not engage with these questions. They continue to operate within a knowledge-transmission perspective, to be prescriptive and top-down, to use highly directive training strategies, and to then assume that any failure in the outcome must be the fault of the individual who is trying to learn to teach (viz. Freeman & Johnson 1998).

VIII. Closing

This paper has examined the notion of teachers' mental lives as a heuristic for the hidden side of teaching. I have tried to create a conversation between two perspectives: the general educational research on teacher learning and teacher knowledge and examples of how that work has found its way into English language teaching. The focus, however, has always been on teacher learning and its relation to more effective professional preparation. There is a widespread assumption in teacher education generally, as well as in ELT, that the delivery of programs and activities is the key to preparing good teachers. In this view, successful teacher education is seen as a by-product of capable teachers-in-training and teacher educators working in well-structured designs with good materials and activities. Underlying these aspects of delivery, however, lies an assumption about the hidden side of the work. There is a rich, varied, and complex process of learning to teach on which teacher education must build. Focusing on this learning process, as distinct from the delivery mechanisms, is changing our understanding of teacher education in important ways. Basic questions of how language teaching is learned and therefore how teacher education interventions can best be organized to support that learning will, hopefully, shape our work moving forward.

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