# MODELS AND THE KNOWLEDGE BASE OF SECOND LANGUAGE TEACHER EDUCATION

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#### **INTRODUCTION**

Although teacher education programs have been in existence for a long time, second language teacher education is a relatively recent development. Traditionally, second or foreign language teachers were either native speakers of the target language or had some recognized expertise in the language. To the extent that instructors from either of these two sources had degree work or undertaken other educational programs, it was generally in the literature and culture of the target language. Indeed, simply being a native speaker was often the only criterion.

However, in the last thirty year, there has been an explosion in the teaching and learning of second languages, both in the actual teaching and in the education of second language teachers. This has been particularly rapid in the field of English as a second/foreign language (ESL), which is the focus of this paper.

In examining pre-service ESL teacher education programs, we can recognize two major aspects. The first is the knowledge base or the information that we believe our students must know. The second aspect is the way or ways in which that knowledge is delivered to our students. I refer to the possible ways as models or approaches. The purpose of this paper is to examine the intersection of the knowledge base with four models. It is a necessary to understand how these two aspects of second language pre-service teacher education come together. Without this understanding, we face the danger of randomly offering courses and other instructional activities for

accidental reasons. An unstructured approach could result in a haphazard educational experience for our students.

I begin by presenting an overview of the four categories of knowledge that I claim form the knowledge base of such programs:

- Content knowledge
- 2. Pedagogic knowledge
- 3. Pedagogic content knowledge
- 4. Support knowledge

This is followed by a discussion of four models or approaches to second language teacher education. The four models are discussed in the following order:

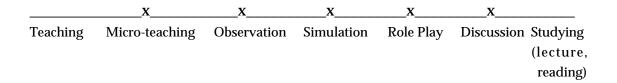
- 1. The apprentice-expert model
- 2. The rationalist model
- 3. The case studies model
- 4. The integrative model

As each approach is presented, I discuss the ways in which each interacts with the four types of knowledge. The paper concludes with suggestions for future directions in pre-service second language teacher education programs.

Before examining the knowledge base, it is helpful to identify a professional knowledge source continuum. As can be seen in Figure 1, a professional knowledge source continuum consists of a variety of experiences and activities by which, or as a result of which, the learner develops knowledge of the profession. At one end of the continuum are those experiences that allow the learner to develop knowledge as a result of teaching. Schon (1983) refers to this as "knowledge-in-action." At the other end, the sources of knowledge are very different, and generally consist of lectures and readings. In between these two ends is a variety of activities that may, depending on their orientation, allow the learner to develop knowledge closer to one end or the other. For example, micro-teaching allows the learner to develop knowledge about teaching that is close to, but not the same as, teaching in an actual classroom with real students. Observing a second

language classroom also is a source of knowledge about teaching, but is rather different from reading about teaching or actually teaching.

Figure 1
Professional Knowledge Source Continuum



It is clear that the source of the knowledge allows the learner to develop a different type of knowledge about teaching. The knowledge that develops from classroom teaching may be termed <a href="experiential\_knowledge">experiential\_knowledge</a>; knowledge developed from sources at the other end of the continuum can be thought of as <a href="acquired">acquired</a> or <a href="received knowledge">received knowledge</a>. (See Wallace (1991:12-13) for a similar, but different, discussion of this topic.) This notion of a professional knowledge source continuum is important as it relates to both the knowledge base and the knowledge emphasized in a particular approach to or model of language teacher education, as is demonstrated below.

# The Knowledge Base of Second Language Teacher Education

Day and Conklin (1992) claim that the knowledge base of second language teacher education consists of four types of knowledge:

- 1. Content knowledge: knowledge of the subject matter (what ESL/EFL teachers teach); e.g., English language (as represented by courses in syntax, semantics, phonology and pragmatics) and literary and cultural aspects of the English language
- 2. Pedagogic knowledge: knowledge of generic teaching strategies, beliefs

- and practices, regardless of the focus of the subject matter (how we teach); e.g., classroom management, motivation, decision making
- 3. Pedagogic content knowledge: the specialized knowledge of how to represent content knowledge in diverse ways that students can understand; the knowledge of how students come to understand the subject matter, what difficulties they are likely to encounter when learning it, what misconceptions interfere with learning, and how to overcome these problems (how we teach ESL/EFL in general; or how we teach ESL/EFL reading or writing in particular, for example); e.g., teaching ESL/EFL skills (reading, writing), teaching English grammar, TESOL materials evaluation and development, EFL/ESL testing, TESOL program and curriculum evaluation and development, TESOL methods
- 4. Support knowledge: the knowledge of the various disciplines that inform our approach to the teaching and learning of English; e.g., psycholinguistics, linguistics, second language acquisition, sociolinguistics, research methods

Day and Conklin (1992) asked 57 ESL teacher education programs at the master's degree level in the United States to categorize their required and elective courses according to these four types of knowledge. They found that there was no consensus among the respondents in the emphasis of the four types of knowledge.

## Models of second language teacher education program

In this paper, the term <u>model</u> (or <u>approach</u>) is meant to characterize the overall way in which a pre-service program presents or delivers knowledge to its learners. In this sense, the term is used rather broadly, and should not be taken to refer to the focus of an individual course that may be offered by a

program.

## **Apprentice-Expert Model**

The apprentice-expert model is the oldest form of professional education and is still used today, albeit rather limitedly. In its most basic form, the apprentice-expert model consists of the trainee or beginner working closely with the expert teacher. Knowledge is acquired as a result of observation, instruction, and practice.

In current ESL teacher education, the apprentice-expert model is not widely-used, if indeed it is used at all as an overall approach to convey knowledge within a program. Its conceptual basis, however, is widely utilized in practicum courses in which students work with classroom teachers, often called cooperating teachers. Its use in one course in a program of ESL teacher education cannot be regarded as a model for an entire program.

The apprentice-expert model has been criticized as being a static approach to a dynamic profession, a profession that has changed radically over the past decade and which will most likely continue to change and develop well into the twenty-first century (e.g., Wallace 1991:6-7). While there is a degree of truth in this criticism, I believe the apprentice-expert model has a great deal to offer the student, particularly if the teacher with whom the student works is indeed an expert teacher. The ideal cooperating teacher is an expert in all senses of the term--one who, in addition to being experienced, is effective, skilled, up-to-date, and so on. The opportunity for students to work with such teachers can be an unparalleled experience. Being an expert teacher obviously does not imply a static approach to teaching.

In examining the apprentice-expert approach to determine which of the four categories of knowledge it treats, it is obvious that it helps the learner to develop pedagogic, content, and pedagogic content knowledge. However, it is doubtful if support knowledge can be dealt with adequately through the apprentice-expert model.

The apprentice-expert approach to second language teacher education allows the learner to develop experiential knowledge, since the primary responsibilities of the learner are in the classroom. In addition, the learner

acquires knowledge through observation of and discussion with the cooperating teacher.

### The Rationalist Model

The rationalist model involves the teaching of scientific knowledge to students who, in turn, are expected to apply this knowledge in their teaching. Ur (1992:56) refers to this approach as the "rationalist learn-the-theory-and-then-apply-it model." As Wallace notes, the rationalist model, in his terms the applied science model, is "the traditional and probably still the most prevalent model underlying most training or education programs for the professions..." (1991:8). Its basic assumption is that teaching is a science and as such can be examined rationally and objectively. The results of such rational and objective examinations are conveyed to the students by experts in the field. Students are said to be educated when they have been exposed to the scientific knowledge which the experts believe are the fundamental elements of a given profession.

An examination of the courses offered by a random sample of M.A. degree programs in ESL in American universities reveals that the rationalist model predominates. In spite of its wide-spread usage, it has some shortcomings. Among the most serious problems is leaving students to apply on their own the scientific knowledge they have learned to teaching. Lasley (1989:i) observes, "Too many of us as teacher educators concern ourselves singularly with communicating content rather than attending to how prospective teachers transform that content into pedagogical practice."

Another shortcoming concerns the separation of research and practice. Wallace (1991:10-11) discusses this separation, noting that those who do research and those who teach are different people. Under this model, a rather unusual situation has developed. Those who are engaged in teacher education are not the ones who actual teach English. These persons, often located in universities, are involved in creating and teaching the knowledge base but they have relatively little direct contact with the practice of teaching English. Perhaps as a result of both the location—universities—and the task—the creation and teaching of a knowledge base—a status distinction has evolved.

Another shortcoming is the rationalist model's failure to address adequately many of the important issues in teaching English. There has been relatively little research that directly concerns the teaching and learning of English in the classroom. For example, task-based learning has recently become one of our buzz words. But I have yet to see significant research evidence to support the claims that its backers make in its behalf. Another example is the Natural Approach, whose empirical foundation is nonexistent.

Ur (1992:57-58) claims that trainees who take courses based on the rationalist model feel that such courses do not help them develop professionally, that the theoretical studies are of no help.

In terms of the four types of knowledge, the rationalist approach is an excellent source of content and support knowledge, but of very limited value, if at all, for pedagogic and pedagogic content knowledge. It is only able to deal with pedagogic knowledge in a limited fashion. In fact, it is questionable if any pedagogic knowledge can be learned merely by studying the results of pedagogic research. A convincing case can be made that students must have hands-on experience in order to learn how to become teachers. I believe that the most comprehensive way of learning about teaching is through the act of teaching itself.

It might be argued that the rationalist model is a fruitful approach to learning about pedagogic content knowledge, as it helps the student to understand theoretical aspects. But I believe that a theoretical understanding of pedagogic content knowledge is only partial understanding. The students must be given opportunities to use their understanding in the ESL/EFL classroom so as to integrate theory and practice. Without such opportunities, students are denied an important aspect of their education.

In contrast to the apprentice-expert model, in which the student develops experiential knowledge, the rationalist approach helps the learner gain received knowledge through various lectures, readings, discussions, and so on. However, I claim that this approach has nothing to offer the learner in terms of classroom experience.

#### The Case Studies Model

The case studies model of professional education involves the discussion and analysis of actual case histories in the classroom. The objectives of this model include the generalization of particular behaviors into broader understandings of the discipline. The case studies model is used in most of the leading law and business schools in the United States, and is being implemented in an increasing number of medical schools.

In contrast, the case studies model has not been as widely embraced in teacher education programs. Merseth (1991) reviews the early history of the use of case studies in teacher education and posits two reasons why the model was not adapted by teacher education at Harvard University as it had been in both law and business: conceptual clarity about its purpose; and the lack of administrative and financial support for the writing of cases by faculty.

Indeed, the critical aspect of the case studies approach is the nature of the cases themselves. A story of a classroom event or experience is not necessarily a case. Shulman (1991:251) claims that a case has a beginning, a middle, and end, and is "situated in an event or series of events that unfold over time," with a plot "that is problem-focused with some dramatic tension that must be relieved." Furthermore, a compelling case is "embedded with many problems that can be framed and analyzed from various perspectives." If the case is written by a teacher, then it should include the teacher's thoughts and feelings of the account. Shulman maintains that teacher-written cases include reflective observations that explore what the authors learned.

Given that central importance of well-written cases in this method of professional education, it is not surprising that this method has not been adopted in second language teacher education. Our profession is only beginning to gain the experience and perspective necessary to develop a compelling case literature. As Shulman (1991:251) points out, identifying a narrative as a case makes a theoretical claim that it is a "case of something or an instance of a larger class of experiences." Our profession is only developing its paradigm. As we move further along this process, it is reasonable to anticipate the development of a case literature and the incorporation of a case studies

approach into second language teacher education.

The case studies approach is an appropriate way to expose students to content knowledge, but is rather limited in its treatment of pedagogic, pedagogic content and support knowledge. Like the rationalist model, the case studies model can only treat pedagogic and pedagogic content knowledge in a limited fashion. Students studying cases should be able to gain some valuable insights into both pedagogic and pedagogic content knowledge, particularly in such areas as teacher decision-making, planning and reviewing a lesson, and various activities and practices. However, let me repeat my belief that the best way to learn about teaching is through the experience of teaching.

Similar to the rationalist model, the case studies model treats received knowledge. Students acquire knowledge through the study of cases, and not through the actual practice of teaching.

Before turning to the fourth approach, let us summarize the discussion at this point. Figure 2 illustrates the interaction of the four types of knowledge that form the knowledge base and the three approaches to second language teacher education. I claim that none of these three approaches by itself provides an adequate treatment of the knowledge base.

Figure 2

The Interaction of Models and Knowledge

**MODELS** 

Approach. Cambridge: Cambridge University Press.

KNOWLEDGE	Apprentice-Expert	Rationalist	Case Studies
Pedagogic	yes	limited, if at all	limited
Content	yes	yes	yes
Pedagogic Content	yes	limited	limited
Support	no	yes	limited

## **The Integrative Model**

It should be clear from the preceding discussion of the three models that relying exclusively on any one of them would result in a failure to deal adequately with the knowledge base. Further, none of the three alone is able to cover the variety of experiences and activities illustrated by the professional knowledge source continuum (see Figure 1). Thus what is needed is an approach or a model that is able to incorporate the strengths of all three, allowing the learner to a full and complete exposure to the four types of knowledge in the knowledge base and the variety of experiences and activities outlined by the continuum. I refer to such an approach as the integrative model.

The integrative model is a systematic approach to second language teacher education that ensures that the learner gains pedagogic, content, pedagogic content, and support knowledge through a variety of experiences and activities. However, merely exposing the learner to the four knowledge types through various activities and experiences does not ensure an integration of the four types of knowledge that form the knowledge base. In order to accomplish this, a reflective practice component must be included in the program.

By reflective practice I mean the critical examination of all aspects of the knowledge base as the student is engaged in the experiences and activities in the professional knowledge source continuum. Simply being exposed to such experiences and activities does not necessarily mean that they come together in such a manner as to allow the student to gain critical insights that result in professional development and growth. Schon discusses "reflection in action" (1983), in which the teacher first acts, then reflects on the action, develops hypotheses which are tried out in more action. Thus, we can see a cycle of teaching, reflection, development of hypotheses, and additional action in which the hypotheses are tried out in the classroom.

Cruickshank and Applegate (1981:553) define reflection as "helping teachers to think about what happened, why it happened, and what else they could have done to reach their goals."

As Posner (1989:21) points out, reflective thinking is not new, and can be

traced to the work of such early educational thinkers as Dewey (e.g., 1933). While reflective practice is often advocated for in-service teachers as a way helping them to become more effective teachers, I believe that it can be a crucial element of pre-service programs. Posner (1989:22) believes that reflective thinking helps students in practice teaching "to act in deliberate and intentional ways, to devise new ways of teaching rather than being a slave to tradition, and to interpret new experiences from a fresh perspective." In addition, helping our students to develop reflective thinking will help them integrate the various types of knowledge that they receive during their program of studies to achieve a coherent and cohesive philosophical approach to teaching. Incorporating reflective practice in an approach to second language teacher education offers the possibility of being integrative in that received knowledge provides the theoretical aspects for thinking about experiential knowledge, and experiential knowledge offers opportunities for trying out and testing received knowledge.

It is beyond the scope of this paper to go into detail on any specific reflective practice activities or exercises that could be part of a reflective practice component in an integrative approach. However, in my work with pre-service teachers I have found that journals, discussion groups, and specific exercises such as those in Posner (1989) are excellent activities to help students to begin to think reflectively.

It is important to stress at this juncture that this fourth model of second language teacher education, to be effective, goes beyond the occasional use of a reflective practice activity in a course or two as students go through their program of studies. To be truly integrative, reflective practice activities have to be a critical part of the students' entire program of studies, and used in all courses, regardless of the type of knowledge with which they are concerned.

#### **CONCLUSION**

In this paper I examine various models and the knowledge base of second language teacher education in an attempt to determine how these two aspects

of second language teacher education interact. I hope to have demonstrated that a reliance on the apprentice-expert, the rationalist or the case studies approaches would be shortsighted. I propose that the ideal curriculum for a second language teacher education program is one which integrates experiential and received knowledge in some systematic fashion. The integrative approach, which combines aspects of the apprentice-expert, the rationalist and the case studies models with reflective practice, comes the closest to having this potential.

The integrative model can systematically incorporate the strengths of the other three models, allowing us to ensure an adequate coverage of the four types of knowledge that form the knowledge base. In addition, it offers our students an approach to practicing their profession that could last them for a lifetime of professional growth and development.

In closing, I would like to make an observation. It is my opinion that there is an overemphasis on the rationalist model in second language teacher education. Ur (1992) eloquently details the shortcomings of this model, in addition to those I mention in this paper. I believe we should take advantage of the case studies model. But, in order to do so, we must first develop the literature to support the model. This can only be done with the collaboration of those involved in teacher education and the teachers in the field. It is through these two parties working together that we can begin to develop the compelling case histories necessary to launch a case studies approach in second language teacher education. This would have the additional benefit of empowering ESL/EFL teachers, as it would include them in the process of creating the knowledge base.

#### REFERENCES

- Cruickshank, D., & Applegate, J. (1981). Reflective teaching as a strategy for teacher growth. *Educational Leadership*, 38,7. 553-554.
- Day, R.R., & Conklin, G. (1992). The knowledge base in ESL/EFL teacher education. Paper presented at the 1992 TESOL Conference, Vancouver, Canada.
- Dewey, J. (1933). How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process. Boston: D.C. Heath.
- Lasley, T. (1989). Editorial. Journal of Teacher Education, XXXX,3.
- Merseth, K.K. (1991). The early history of case-based instruction: Insights for teacher education today. *Journal of Teacher Education*, 42,4. 243-249.
- Posner, G.J. (1989). *Field Experience: Methods of Reflective Teaching*. New York: Longman. (second edition)
- Schon, D.A. (1983). *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books.
- Shulman, J.H. (1991). Revealing the mysteries of teacher-written cases: Opening the black box. *Journal of Teacher Education*, 42.4, 250-262.
- Ur, P. (1992). Teacher learning. *ELT Journal* 46/1. 56-61.
- Wallace, M.J. (1991) *Training Foreign Language Teachers: A Reflective Approach*. Cambridge: Cambridge University Press.