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ABSTRACT

Traditionally, the knowledge base has been defined more as product than process and has encompassed definitions, principles, values, and facts. Recent reforms in teaching and teacher education have brought about efforts to redefine the knowledge base. The reconceptualized knowledge base builds upon the earlier model but gives higher priority to reflective thinking, actively exploring problems, and learning from experts. While furnishing a constructivist knowledge base for such a vision is problematic, teacher educators might consider five areas of focus as a scaffolding for reform: (1) autobiography, intended to increase awareness of oneself and one's beliefs; (2) inquiry, an ongoing exploration of complex questions; (3) reflection, which draws on intuitive knowledge to synthesize understandings into a new and fuller form; (4) critique, which sees teacher educators and teachers as critical, even political, thinkers who consider decisions about content and method to be value judgments, not just rational management decisions; and (5) community, the development of jointly constructed, productive connections for sharing and overcoming problems. As applications of some aspects of this newer view of the knowledge base, four commonly cited problems for second language teacher education are discussed: fragmentation, tensions between language-based coursework and courses in pedagogical and professional development, the theory-practice gap and the role of field experiences, and the tension between the training and development of language teachers. (32 references) (AMH)

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# TEACHER EDUCATION: CONSIDERATIONS FOR A KNOWLEDGE BASE FRAMEWORK

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# TEACHER EDUCATION: CONSIDERATIONS FOR A KNOWLEDGE BASE FRAMEWORK

This paper summarizes the traditional forms of pedagogical knowledge found in teacher education programs, and then describes and discusses some recent attempts to redefine this traditional knowledge base. As applications of some aspects of this newer view, implications for second language teacher education will be suggested.

## I. The Traditional Knowledge Base for Teachers

What is it that teachers need to know? The familiar curriculum question asks, "What knowledge is of most worth?" Historically, pedagogical knowledge has been defined more as a product than as a process. Smith (1980) has outlined four forms of pedagogical knowledge which embody this traditional view : definitions, principles, values, and facts. These dimensions encompass the knowedge base, which may be academic (theory based) or clinical (derived from experience). Definitions are a body of standard terms which refer to concepts of importance to teachers. One thinks, for example, of "advance organizers", as defined by Ausubel, or "academic learning time", defined by Berliner. A definition may derive originally from a theoretical base, and be therefore considered "academic" as is the term "advance organizer"; or it may derive from classroom observation, as did the concept of "academic learning time" and be considered "clinical". Teacher education programs have traditionally included exposure to the terminology of teaching, as well as to the terminology of particular disciplines.

A second form identified by Smith is principles. Principles are regularities, the way in which variables interact in predictable

ways. A principle tells us about a relationship. For example, we know that in any list of items which can be memorized, certain items will be more salient than others. One principle that explains this phenomenon is that human short term memory is limited. A related principle is that people tend to remember the items at the beginning or end of a list, and forget the items in the middle. These principles are of interest to all teachers. Principles are helpful, but they do not tell us what to do. They are not prescriptive.

A third pedagogical form is values. Values are judgments, and must be based on criteria. They imply action, the actualization of the knowledge derived from the principles. A statement of values is "This method is good." Another is "We should involve our students in the planning of their own coursework". One needs to be able to back up such value statements with principles which are consistent. But value statements are also a reflection of philosophical positions, and philosophical positions may conflict as to the aims of education or the essence of teacher effectiveness. In such cases, we would not expect values to necessarily be in accord. For example, one person may define an effective teacher as one whose class is quiet and orderly; another person might have a very different definition of what constitutes teacher effectiveness. Each value statement can draw on evidence which supports its claim.

It is not surprising that, historically, teacher education programs have veered away from explorations of the relative merits of conflicting value statements, and have tended instead to prescribe various methods of teaching or of classroom management which command substantial authority either due to a research base or merely to tradition.

The fourth form identified by Smith is factual knowledge , such as the statement "Hispanic students tend to exhibit Field Dependent cognitive style", or the statement "Inner city students have a higher drop out rate than do suburban students." Like value statements, so called factual statements are often interpretive rather than merely factual, for they assume the validity of the principles or other variables involved, and furnish in many cases an additional data item to be categorized according to existing classifications.

We can see that this model of pedagogical knowledge, while useful and systematic, is inadequate in several respects. An inaccurate picture of what teaching is all about is presented. A reductionist mentality decomposes "good teaching" into bite sized chunks, which are presented to the learner as isolated instances. These chunks derive from a pre-existing body of knowledge. Additionally, and more crucially, the learner, who is a prospective teacher, is not furnished with opportunities for making reflective decisions, models of that process, or practice in thedevelopment of criteria on which sound judgments can be based. Zeichner and Liston (1987) characterize this as the "apprenticeship model", one which fails to promote growth and full professional development.

## II. A Reconceptualized Knowledge Base

Recent reforms in teaching and in teacher education have been prompted by reports urging the improvement of teaching and the enhancement of its status as a profession (Carnegie Task Force 1986, Holmes Group 1986). The two goals are closely linked. The professionalization of teaching depends on a redefinition of the

knowledge base, which in turn, will inform practice. Where will this redefinition come from?

Dissatisfaction has grown, during the 1980s, with the emphasis in schools on the teaching of discrete lower level skills. A parallel development has occurred in the way we conceptualize the education of teachers - a break away from the focus on technical expertise and the mastery of discrete skills, towards a new view of the complexity inherent in teaching (Schon 1987, 1988, Grimmett 1988). The reconceptualized knowledge base does not so much reject the earlier model as build upon it, relegating its categories to a more minor role. Observable skills and research on teacher effectiveness are still regarded as valuable, but not sufficient components of a program preparing future teachers. High priority is now given to the ability to engage in sound pedagogical reasoning, based on a foundation of adequately grounded premises (Shulman 1987: 13). Various teacher education programs have responded with innovative interpretations of this recocneptualization. At Michigan State University (Colton et al. 1989), for example, a taxonomy has been developed to describe and examine levels of language and thinking by teachers as they probe the meaning of classroom events, based on the grounds and supporting evidence they use in their judgements.

Two images are commonly invoked as catalysts for the process of reflection: "good thinkers" and "experts".

Good thinkers are described by Ennis, who calls critical thinking "reasonable reflective thinking that is focused on deciding what to believe or do" (1987: 9). This image, of the reflective thinker making sound pedagogocal decisions, permeates the recent literature (Fenstermacher 1986, Martin 1989, Schon 1987, Shulman 1987, Zeicher & Liston 1987, Combs 1989), and harks back to the spirit of Dewey who noted

(1904), it is more important to prepare teachers who are "thoughtful and alert students of education than it is to help them get immediate proficiency." Dewey's definition of reflective thinking is taken as the cornerstone of teacher education models with this emphasis:"active, persistent and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it and the further conclusions to which it tends" (1933:9). The phrasing sounds a little old fashioned but the idea echos in the current literature : knowledge arising out of experience and active exploration of pedagogical problems. One tenet of the reconceptualized knowledge base is the tentative nature of knowledge and the necessity for active, recursive exploration of problems by teachers and coaches. One program which bases its model on this tradition of Dewey is the University of Wisconsin (Madison), which focuses on reflective rather than routine action, an inquiry oriented milieu, knolwedge viewed as problematic, and a curriculum at least partly constructed by the learners themselves (Zeichner and Liston 1987).

The image of the "expert" teacher is the other thread running through innovative writings and programs. What can we learn from those who are already masters? Lee Shulman (1987:3) describes "Nancy", a teacher of great skill and sensitivity:

> (her)"pattern of instruction, her style of teaching, is not uniform or predictable in some simple sense. She flexibly responds to the difficulty and the character of the subject, the capacities of the students (which can change even over the span of a single course), and her educational purposes."

He then asks, "What does Nancy believe, understand, and know how to do that permits her to teach as she does? Can other teachers be prepared to teach with such skill?" (1987:3).

Furnishing a constructivist knowledge base for such a vision is admittedly problematic. Self directed growth is a high priority and does not lend itself to prespecification. Therefore, the curriculum for the planning of such education cannot conform to the traditional linear model. Much to be learned is exploratory, and inductive, and much is personal and subjective.

Ayers (1988) has suggested five areas of focus for the reform of teacher education, which may provide the type of scaffolding which is useful here. He enumerates five approaches towards knowledge in teacher education:

1. Autobiography
2. Inquiry
3. Reflection
4. Critique
5. Community

Autobiography , long advocated in the preparation of teachers (Lortie 1975) is intended to increase awareness of oneself, and one's beliefs (Combs 1989). Furthermore, the act of self narrative, the telling of one's story, can be seen as an act of composition or construction rather than merely one of reporting (Karjohn 1989). Meaning is created through the interpretation of events in the world, and forms a basis for future action.

Inquiry , is an ongoing exploration of complex questions. The learner approaches knowledge with the idea that findings may be tentative and that good thinking is by definition self corrective and recursive. Part of the inquiry process is the identification of problems.

Reflection , draws on intuitive knowledge so as to synthesize understandings into a new fuller form.

Critique sees teacher educators and teachers as critical, even political. One is reminded on Giroux's phrase for teachers: "transformative intellectuals." Decisions about content and method need to be examined as value judgments, not just rational management decisions.

Community is the development of jointly constructed productive connections for sharing and overcoming problems.

These five areas combine an inward-looking reflection with an outward looking critical consciousness. They need not be mutually exclusive. The organization of the teacher education curriculum can be guided by these concepts even as they overlap.

III. Language Teacher Education

In order to see if the reconceptualized knowledge base can be helpful to our profession, I will list some current identified problems in language teacher education, and ask to what extent they can be addressed by an inquiry driven, reflective decision maker model.

One commonly cited problem, for educators of foreign language and ESL teachers, is fragmentation. Often the methodology or content of individual courses does not link in any meaningful way to the field experiences or practicum. Fragmentation and lack of communication exist at the program level, and faculty do not engage learners in the development of knowledge and skills that they will need as teachers. Teachers are often prepared for teaching by listening to someone lecture about it, or by carrying out assigned readings (Celce-Murcia 1983,

Bernhardt and Hammadou 1987). The degree to which a reconceptualized knowledge base can address this problem depends on institutional support and individual flexibility. Institutions which are willing to redefine their mission as educators of reflective teachers can provide opportunities for faculty to meet and explore alternative, holistic pedagogies (cf. Colton et al. 1989). The origins of such discussion need to arise at the insitutional level, rather than at the departmental level, if they are to have any hope of success, since teacher education reforms are notoriously difficult to implement (Keith 1987, Goodman 1989). As with innovations in the schools, participants need to feel invested in the process and be willing to change, not be told that they "should" change for their own good (Tumposky 1987). An additional problem in this area is that faculty in schools of education, and teacher education programs in general, have low status in the university hierarchy, and faculty from other schools (such as Arts and Sciences) tend to resist pressure to change coming from this source.

A related problem identified in the literature is that of the tension between language based coursework and courses in pedagogical and professional development. The legimitacy of coursework in curriculum and instruction is often questioned and so it remains a minor part of many programs. It is common for a foreign language teacher to be prepared by many credit hours of language courses and one 3 credit methods course; or for an ESL teacher to complete substantial coursework on phonology, transformational grammar, contrastive analysis, and second language acquisition, but again only 3 credits on metholodology (Richards and Crookes 1988). If it were the case that this larger part of the program was well integrated and had an applied focus, the imbalance might be excusable. But it appears that much of the language based coursework is

often taught without any particular pedagogical thrust (Celce Murcia 1983). Furthermore, within many foreign language departments, the applied aspects of teaching and learning are as low status as is the general place of the School of Education within the university. Reform in such areas is possible, but again, only within the context of an institutional committment to a reconceptualized knowledge base.

A third problem identified in language teacher education is that of the theory-practice gap and the role of the field experiences (Richards and Crookes 1988). The aims and procedures of field experiences are often poorly defined, and cooperating teachers, chosen haphazardly, are frequently not well prepared for their role. Cooperating teachers may not have enough contact with the rest of the program to be able to extend and build on the learnings from the coursework, and, additionally, may lack training in the theory of supervision (Bernhardt and Hammadou 1987). In this area, a reconceptualized knowledge base which is inquiry oriented and reflective may be very effective, but will require the involvement of cooperating teachers in joint reflective inquiry together with program based supervisors and staff (cf. Colton et al. 1989).

A final issue, well posed and developed by Freeman (1989) is the tension between training and development of language teachers. How can the more micro-level skills of teaching be integrated with more sophisticated understandings? How can we, as trainers, combine short term solutions and long term directions for growth? While the answers to this questions are beyond the scope of this paper, I will suggest several directions that reconceptualized teacher education programs might take: One is to return to Bruner and Schwab's notion of the structure of the disciplines, so as to promote reflection about how we think when we think about language, and about teaching, and the to employ the 5 types of

inquiry suggested by Ayres (1988). Another approach is to devise academic tasks, within each content area, which create puzzlements and opportunties for reflection. Ideas for such tasks may come from other disciplines (such as philosophy, anthropology, psychology) or from other programs, which combine formal and experiential learning (cf. Moeller 1989). If problem setting and solving is built into the program through the coursework and the field experiences, we will be acting with our learners/teachers as we hope they will be acting with their own learners - encouraging them to take reasonable risks and reflecting, individually and together, on their actions.

## REFERENCES

Ayers, William. (1988). Fact or fancy: the knowledge base in teacher education. Journal of Teacher Education, 39(5): 24-29.

Bernhardt, Elizabeth and J. Hammadou. (1987). A decade of research in foreign language teacher education. The Modern Language Journal, 71(3): 289-299.

Brophy, J.J., and T. Good. (1986). Teacher behavior and student achievement. In M.C. Wittrock (Ed.), Handbook of Research on Teaching (3rd ed., pp. 328-375). New York: Macmillan.

Carnegie Task Force on Teaching as a Profession. (1986). A nation prepared: Teachers for the 21st Century. New York: Carnegie Forum on Education and the Economy.

Celce-Murcia, Marianne. (1983). Problem solving: a bridge builder between theory and practice. In J.E. Alatis, H.H. Stern & P. Strevens (Eds.), Applied Linguistics and the Preparation of Second Language Teachers (pp. 97-105). Washington, D.C.: Georgetown University Press.

Colton, A.B., Sparks-Langer, G.M., Tripp-Opple, K., and J.M. Simmons. (1989). Collaborative inquiry into developing reflective pedagogical thinking. Action in Teacher Education 11(3): 44-53.

Combs, Arthur. (1989). New assumptions for teacher education. Foreign Language Annals. 22(2): 129-134.

Dewey, John. (1904). The relationship of theory to practice in education. In C.A. McMurray (Ed.), The third yearbook of the National Society for the Study of Education. Chicago: The University of Chicago Press.

Dewey, John. (1933). How We Think. Chicago: Henry Regnery.

Ennis, R. (1987). A taxonomy of critical thinking dispositions and abilities. In J.B. Baron & R.J. Sternberg (Eds.), Teaching Thinking Skills: Theory and Practice (pp. 9-26). New York: W.H. Freeman & Co.

Fenstermacher, G. (1986). Philosophy of research on teaching: Three aspects. In M.C. Wittrock (Ed.,), Handbook of Research on Teaching (3rd ed., pp. 37-49). New York: Macmillan.

Freeman, Donald. (1989). Teacher training, development, and decision making: A model of teaching and related strategies for language teacher

education. TESOL Quarterly, 23(1): 27-45.

Goodman, Jesse. (1988). University culture and the problem of reforming field experiences in teacher education. Journal of Teacher Education (Sept - Oct): 45-53.

Grimmett, Peter. (1988). The nature of reflection and Schon's conception of perspective. In P. Grimmett and G. Erickson (Eds.), Reflection in Teacher Education (pp. 5-15). New York: Teachers College Press.

The Holmes Group (1986). Tomorrow's teachers: A report of the Holmes Group. East Lansing, MI.

Huebner T., Bartolome, L., Avelar-Lasalle,R. and M. Asevedo. (1989). Integrating language education, teacher training, and university-school collaboration: a pilot project. The Modern Language Journal, 73(1): 23-30.

Jarvis, Gilbert. (1983). Pedagogical knowledge for the second language teacher. In J. Alatis, H.H. Stern and P. Strevens (Eds.), Applied Linguistics and the Preparation of Second Language Teachers (pp. 234-241). Washington, D.C.: Georgetown University Press.

Karjohn, Lesley. (1989). Self-reflection: the role of autobiography in critical thinking. Inquiry: Critical Thinking Across the Disciplines (Montclair State College). 3(3): 7-10.

Keith, M. (1987). We've heard this song . . . or have we? Journal of.

Teacher Education , 38(3): 20-25.

Lortie, D. (1975). Schoolteacher. Chicago: University of Chicago Press.

Martin, David S. (1989). Restrucuring teacher education programs for higher order thinking skills. Journal of Teacher Education, 38(4): 2-8.

Moeller, Paulette. (1989). The making of a foreign language teacher - Regina style. Foreign Language Annals, 22(2): 135-143.

Posner, George. (1989). Field Experience (second edition). New York: Longman.

Richards, Jack. (1987). The dilemma of teacher education. TESOL Quarterly 21(2): 209-226.

Richards, Jack and Graham Crookes. (1988). The practicum in TESOL. TESOL Quarterly, 22(1): 9-27.

Schon, Donald. (1987). Educating the Reflective Practitioner. San Francisco: Jossey-Bass.

Schon, Donald. (1988). Coaching reflective teaching. In P. Grimmett and G. Erickson (Eds.), Reflection in Teacher Education (pp. 19-29). New York: Teachers College Press.

Shulman, Lee S. (1987). Knowledge and teaching: foundations of the new reform. Harvard Educational Review 57(1): 1-22.

Smith, B. O. (1980). A design for a school of pedagogy. Washington, D.C.: U.S. Department of Education.

Tumposky, Nancy. (1987). Staff development and curriculum implementation. The Educational Forum 51(2); 185-194.

Zeichner, Kenneth. (1986). Preparing reflective teachers: An overview of instructional strategies which have been employed in preservice education. International Journal of Educational Research, 11(5): 565-575.

Zeichner, Kenneth M. and Daniel P. Liston. (1987). Teaching student teachers to reflect. Harvard Educational Review 57(1): 23-48.