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# The role of educational psychology in teacher education programs

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## Abstract

Education and psychology are interdependent. One psychologist said that I did not understand how a teacher could teach without the knowledge of education Psychology. Psychology had changed the spirit of education and it gives new meaning to learning in classroom. Psychology also changed the old concept of education where only upper class had the ability and right to learn. Psychology gives education the theory of individual differences that every child has different mental ability and learns with different pace. Today in modern era, education psychology is the foundation of education. Psychology effect education in every field of teaching learning process. For years, teacher educators have written about the purposes, aims, and goals of educational psychology and have stressed the relevance of the field for the practice of teaching and learning (Alexander 2004; Berliner 1993; Brophy 1974; Woolfolk Hoy 2000). However, as Sternberg (1996) noted, educational psychologists seem to be having more and more trouble explaining to educators what they do and why educators should care. In this special issue, authors explore the relevance of educational psychology in teacher education programs, noting how educational psychology contributes to the preparation of teachers. It is very essential for a teacher to teach his students according to their mental abilities. Educational psychology helps the teacher in doing so. It enables the teacher to teach where and how? The way in which teachers are educated and supported to meet the challenges of the 21st century has become a contended issue. In raising alarm, criticizing the status quo, and making recommendations, various study groups and blue ribbon panels have focused on economic issues, equity and excellence, the need for more rigorous subject matter preparation, and on the restructuring of incentives and the career ladder for teachers.

*Keywords: educational psychology, teachers, instruction*

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## 1. Statement of the issue

Over the years, educational psychology has been a part of teacher preparation, moving from a centerpiece in many programs, through periods when it was deemed irrelevant by some, to current concerns about its role in the reforming of teacher education and teaching. Today, psychological knowledge is used to ground reforms in teaching and schooling, particularly the call for teaching for understanding. Current standards for teacher certifications and licensure and suggestions for reform in teacher education assume that teachers will have a deep and generative understanding of learning, development, motivation, and individual differences. This article explores several themes that recur in the writing on reforms and teacher standards: the need to place learning at the center of teaching, the

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call for integrated studies, and the value of collaboration with the public schools. These themes have both positive and negative implications for the role of educational psychology in teacher education. Traditional models of teacher training often emphasized pedagogy (particularly general pedagogy) at the expense of content area preparation, at least according to the critics. This is by now well recognized and has led to a variety of reform proposals focusing on increasing content area preparation. One influential model of reform (Shulman, 1987) construes teacher expertise as comprised of three, interwoven, strands: (1) content knowledge, (2) pedagogical knowledge (both general and specific), and (3) knowledge of learners and learning (see figure 1). The first strand has been the focus of several critiques and subsequent revisions of teacher training programs. The second strand represents the traditional focus of teacher preparation programs, i.e., methods instruction. The third strand, however, has received relatively little attention in the recent reform literature. We propose that what is needed is a model for preparing teachers which includes as a key component a strong focus on expertise in diagnosing human learning, motivation, and development. We wish to note, to avoid misunderstanding, that we are not dismissing the importance of either pedagogical or content preparation. Such a recommendation would be unsound. Nevertheless, turning teachers into skilled diagnosticians of learners and learning, we argue, is an essential ingredient in upgrading teacher preparation and professional development. Hence, our approach is not so much a matter of replacing current reforms as it is a matter of completing them. Promoting the development of diagnostic expertise with regard to learning/cognition, motivation, and development is, we believe, the critical missing element in typical teacher preparation programs.

## 2. Review of Literature

The fact that teachers should possess an understanding of human development, learning and motivational theory has traditionally not been a matter of dispute. Courses focusing on these topics have been standard fare in teacher preparation programs for at least 100 years (Berliner, 1993). Unfortunately, such courses, as currently taught; rarely produce much beyond a rudimentary understanding of their core content. Typically, they are chiefly educational psychology survey courses whose primary aim is to cover as many theories and as much information as possible in the shortest amount of time. Small wonder, then, that the relevance of such courses have recently come to be challenged (Anderson, et. al., 1995; Berliner, 1993; Hoy-Woolfolk, 2000; O'Donnell & Levin, 2001; Weinstein & Way, 2003). In fact, where once the importance of such courses were taken for granted, educational psychology now finds itself in the position of having to defend inclusion of its content in teacher preparation programs (Anderson, et. al., 1995; Weinstein & Way, 2003). Proposals for how courses in educational psychology might become more relevant and useful have been many and varied (see, for example, Anderson, et. al., 1995; Hoy-Woolfolk, 2000; Poulou, 2005; Renninger, 1996; Shuell, 1996). Although considered useful and a positive development overall, such changes have not gone unchallenged (Doyle & Carter, 1996). According to Doyle & Carter (1996, p. 25), for example, "It is not enough simply to contend that educational psychology can be taught more effectively." Doyle and Carter go on to emphasize the need for educational psychology to contribute to teachers' "action frames" or methods instruction. There may be a role for educational psychology in methods instruction; however, we do not think this represents the central contribution of educational psychology to teacher preparation and professionalization. The type of knowledge that Doyle and Carter emphasize, while not unimportant, is largely procedural and tacit in nature and does not, therefore, is not ideally suited for the development of the kinds of reflective engagement with practice that will lead to generalize and flexible principles of practice needed for today's professional educators. Instead, what is needed is a solid grounding in knowledge of learners and learning (development, cognition, motivation, etc.) coupled with extensive and penetrating practice in the application of such knowledge via diagnosis of learners and learning situations. The question remains, however, how is this to be accomplished? One approach that has been widely recommended in reform proposals for educational psychology involves the use of rich cases from educational settings to situate and apply the theoretical concepts taught in an educational psychology course (Anderson, et. al. 1995, Hoy-Woolfolk, 2000; Renninger, 1996). Another important device is the use of tutoring by teacher candidates as an opportunity to develop diagnostic skill (Renninger, 1996). By situating the teaching of theoretical knowledge of cognition, development, and motivation in discussion of case exemplars and tutoring conditions, teacher education candidates can be taught that such content represents a set of useful tools for the diagnosis of learners and learning, both of the general and content specific variety. Furthermore, within such a process they can be prompted to develop and hone analytical skills not typically emphasized in teacher preparation programs.

### **3. Knowledge of the Psychology of Teachers' Learning**

In their recommendations for reform in teaching and teacher education, both the Carnegie Forum Task Force and the Holmes Group portray the new vision of thoughtful teachers as ones who are engaged continuously in the process of learning; are "able to learn all the time"; and who view learning and development as a lifelong process for themselves and their students.<sup>33</sup> Just as the field of educational psychology has been affected by advances in cognitive psychology, the field of developmental psychology has been transformed in recent years by a life-span developmental perspective that argues for a view of teachers as professionals who continue to learn and develop throughout their teaching careers.

In developing this capacity for continuous learning, teachers may benefit by knowing not only something about how other teachers learn, but also by reflecting on their own processes of learning. If teachers are to become thoughtful professionals, they need to have both meta cognitive knowledge for classroom learning as well as meta cognitive knowledge for classroom teaching. The former involves learners' self-awareness of their own cognitions through which they acquire information, gain understanding, and learn in the classroom. Meta cognitive knowledge for classroom teaching includes self-awareness and ability to reflect on one's own cognitive knowledge for classroom learning, as well as ability to reflect on knowledge about classroom teaching. Although little research has been done on such meta cognitive knowledge of teachers, many researchers, including educational psychologists, are now suggesting that teachers' self-awareness and deliberate action are important aspects of teaching expertise that need to be studied.

### **4. Teachers' Learning and Thinking as a New Domain in Educational Psychology**

Both the above discussion as well as several current research endeavors suggest the emergence of a new domain of knowledge in educational psychology the psychology of teachers' learning.

Although the subject of teachers' learning was the focus of some early studies by educational psychologists learning to teach more than a decade ago,<sup>36</sup> educational psychologists have tended not to focus on teachers' learning as an important area of study. Only in the past decade have educational psychologists turned their attention from the study of teachers' behavior to the study of teachers' thinking, cognitions, and knowledge.<sup>37</sup> The studies by Leinhardt and Putnam (of networks of teachers' knowledge and script theory) and of Lampert (on the role of teachers' understanding of subject matter and interpretation of what students mean) are most salient.<sup>38</sup> One can begin to see that research why and how teachers come to behave as they do. This literature and that of other researchers on teacher thinking<sup>39</sup> have explored the many ways in which teachers think, plan, and decide, and how teachers' work is constrained by the world in which teachers operate. Using psychology to understand the teacher in this way might make contact with teachers in powerful ways. Such psychological windows into teachers' thinking or psychological lenses for examining teaching also open up new possibilities for metaphors that convey new ways of thinking about how to connect psychology to teacher education.

Researchers studying teachers' thinking and teachers' knowledge have typically used cross sectional rather than longitudinal approaches and thus have not examined teachers' learning or the development of teachers' thinking over time. More recently, educational psychologists and teacher educators have begun working together to conduct a longitudinal study of how teachers' learn to teach. They are studying the development of teachers' knowledge, skills, and dispositions related to teaching writing and mathematics in 11 different teacher education programs over a three-year period.

They are also examining teachers' beliefs including their conceptions of knowledge. This research represents an ambitious new effort and the methods as well as the findings may be useful to educational psychologists who want to study the learning of students in their own teacher education program.

Because both research on teachers' thinking and research on teachers' learning is relatively recent, not much of the content and findings from this work have appeared in contemporary educational psychology textbooks. Even though findings from this research have not yet appeared in textbooks, these topics may constitute an important content domain that should be learned and taught in educational psychology in teacher preparation programs.

Knowledge of the psychology of teachers' learning might contribute to the effective teaching of educational psychology in two ways. First, such knowledge would be useful as educational psychologists begin the process of conceptualizing the learning and teaching of educational psychology in the preparation of teachers for the 21st century.

Second, such knowledge would be particularly informative as educational psychologists think about the possibility of adapting the content and methods of educational psychology to the individual learner.

## 5. Conclusion

The above discussion illustrates the centrality of knowledge of the psychology of teachers' learning. In reflecting on this topic, we propose three points for consideration:

- first, that the psychology of teachers' learning constitutes an important new domain of knowledge in educational psychology;
- second, that the knowledge of theories and research findings on the psychology of teachers' learning may be meaningful and important for students in teacher education, and further, may enhance their teaching practice
- and third, that knowledge of the psychology of teachers' learning may enhance the ability of faculty to teach educational psychology more effectively in teacher preparation programs.

Finally, as mentioned, it would lead to more effective practice in the classroom. The long-term results of the emphasis will be presented in various professional forums and optimistically will change the look of educational psychology courses and textbooks. Moreover, adding this element to teacher preparation will raise both the competence and profile of teachers as professionals, while allowing us to challenge on empirical grounds the popular notion that "anyone can teach." Content specific knowledge Pedagogical (general & Specific) knowledge of learners and learning Professional Knowledge Base for Teaching Includes: 1. Declarative 2. Procedural 3. Conditional Knowledge

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