

Research Notes

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Professional Development: How Is It Defined? How Is It Measured?

Research has consistently found that effective teachers are critical to high-quality early learning programs. Children experience more positive cognitive, social, and emotional outcomes when they are nurtured and taught by consistent, highly qualified, and appropriately compensated teaching staff.¹ Professional development has become a high priority of policymakers because of the linkages between teachers, program quality, and child outcomes. But what exactly does professional development mean? How is professional development measured by researchers? These questions were the focus of a paper, *Defining and Measuring Professional Development in Early Childhood Research*, by researchers Maxwell, Feild, and Clifford.²

To better understand how professional development is defined and measured in early childhood research, the authors reviewed research that measured the professional development of lead teachers or family child care providers and that met high standards of research scholarship. Their review focused on studies that were published in peer-reviewed journals, included a sample size of at least 50 teachers or providers, and were conducted in the United States. A total of 27 studies met the criteria for inclusion. The studies were all published between 1988 and 2003 and represented community-based child care, Head Start, school-based prekindergarten, and family child care. For purposes of their review, the measures utilized in each study were the focus of analysis.

Findings

Based on their review of the studies, Maxwell, Feild, and Clifford conclude that no common definition of professional development exists. Researchers conducting the individual studies did not provide explicit explanations of the meaning of the various professional development terms used in their studies. Instead they implied the meaning of professional development terms by operationalizing them in the measures. Therefore, the measures themselves were analyzed to arrive at an understanding of professional development. Because no common definition of these professional development terms emerged from the analysis, the authors developed their own definitions and applied them to the analysis of measures used in the 27 studies. The authors identified three key components of professional development: education, training, and credential.

Education refers to professional development activities that occur within the formal education system and includes both general education and content specific education.

- All of the studies reviewed measured some aspect of education.
- Most measures included questions regarding an early childhood education degree with about half measuring content only for the highest degree attained.

Training refers to professional development activities that occur outside of the formal education system.

- Training questions typically covered type (e.g., in-service workshops, and conferences) and content.
- Most studies gathered more detailed training data than was reported in the published articles based on the studies.
- Less than half of the studies that measured training content reported it in a peer-reviewed article.

Credential refers to certification or licensing of individuals that conveys both status to the holders and provides assurance to consumers.

- Most measures asked one or more questions about credentials or licenses.
- Inconsistencies in certification or licensing across states and agencies make it difficult to know the meaning of a particular state-specific certificate or license.
- The most frequently listed credential across all measures was the Child Development Associate (CDA) credential.

The lack of consistency in nomenclature and terminology used in different studies poses problems for researchers, policymakers, and study participants.

Recommendations

Based on their review of the measures utilized in the 27 studies, Maxwell, Feild, and Clifford offer the following recommendations:

Develop common definitions of professional development

The lack of consistency in nomenclature and terminology used in different studies poses problems for researchers, policymakers, and study participants. Without common definitions, the measurement of professional development cannot yield consistent and reliable data across studies. Of the three components of professional development, training was the most problematic.

Work toward consistency in measurement across studies

Researchers need to agree on a small common core of questions to measure particular components of professional development in order to increase comparability across studies. Researchers could supplement the common core of questions with additional questions to address their study-specific concerns. Public and private funders of research should develop consortia to address these issues and develop agreements to use common measurement methods.

Expand data collection to include the context of professional development activities

In order to appropriately interpret the data, understanding the context of professional development activities is crucial. For example, providing data on the number of teachers with a state-specific credential is of little use to others unless the number and content of courses needed to obtain the credential is provided. In regards to training activities, it may be more important to know whether the teacher or provider participated in more training than required by the employer or state than the actual number of training hours completed.

Use hypotheses to drive instrument development

Researchers need to clearly link their hypotheses to each question in their measures so that unnecessary data are not collected and data are collected in a way that permits researchers to test specific hypotheses about professional development issues. The current knowledge base should be used to develop the hypotheses about professional development.

Conduct additional research on the impact of professional development on teachers' behavior, the quality of care and education, and child outcomes

Researchers need to learn about the effects of specific professional development activities on teaching practices, learning environments, and child outcomes in order to develop specific hypotheses about professional development. For example in regards to training, is it the type, content, quality, or quantity that is most important?

Understanding how professional development is defined and measured in early childhood research is foundational to all research knowledge about early childhood professional development. Coming to consensus on the meaning of the key elements of professional development—education, training, and credentials—is the first step.

1. Arnett, J. (1989). Caregivers in day care centers: Does training matter? *Journal of Applied Developmental Psychology, 10*, 541-552. Barnett, W.S. (2003). Better teachers, better preschools: Student achievement linked to teacher qualifications, *Preschool Policy Matters, 2*. New Brunswick, NJ: NIEER. Phillips, D., Mekos, D., Scarr, S., McCartney, K., & Abbott-Shim, M. (2001). Within and beyond the classroom door: Assessing quality in child care centers. *Early Childhood Research Quarterly, 15*(4), 475-96.
2. Maxwell, K.L., Feild, C.C., & Clifford, R.M. (in press). Defining and measuring professional development in early childhood research. In M. Zaslow & I. Martinez-Beck (Eds.), *Critical issues in early childhood professional development*. Baltimore: Paul H. Brookes.

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