



*Full Length Research Paper*

# Verifiable study in the settings of early childhood: Attainable gains for teachers' expertise

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The amount and depth of published research relating to the transformation of education settings for the purpose of positively influence children and their functioning in learning environments continues to increase. The basic idea is that research should have social significance and be useful for practitioners (service research) by giving them the tools to improve their classroom environments as well as their personal competencies. One question that could be asked is: what are the implications and the general usefulness of this research in terms of professional development for teachers and others in the field of education? Do these studies provide useful suggestions to teachers who are developing their professional skills? To answer these questions, a systematic literature review was conducted. This article aims to provide a descriptive map of the issues that emerged during the literature review, with a particular focus on elements of empirical research that could be considered for professional development in education. The results from the article analysis show that the descriptions of teachers' competencies in the published literature are primarily cognitive and instrumental, affective and social; few studies explicitly provided practical teaching advice. During the review, 341 articles were excluded because they did not contain information relevant to teachers' expertise. Of the articles reviewed, the information useful to teachers is often general and usually placed in a short concluding paragraph at the end of a given article. More useful professional development opportunities occur when teachers are actively involved in research. In conclusion, the review also shows that in recent years more attention has been directed to the exact items that have relevant implications with respect to the expertise of teachers.

**Keywords:** educational journals, childhood, teacher expertise, systematic review

## INTRODUCTION

The amount of research (as measured by publications on education in childhood contexts) is increasing. What can we say about the research that either exists or is currently being created? The basic idea of the interpretive theoretical framework is that research should have a

social significance and be useful for practitioners (service research) by giving them the tools to improve their competencies and the realities of teaching that they confront every day (Mortari, 2009). The creation of a social relevant inquiry, as Friedman (2001) writes, is to

produce a useful theory for practice.

In education, as with other fields, there is a pressing need for research to be useful. I personally feel the need to engage in practical, useful research that makes a difference and is able to yield improvements in real-world environments. According to pragmatism, the researcher is a thinker in the service of humanity, and has the task of developing thoughts that are useful to the community (Rorty, 1991). Thoughts can be considered useful to the extent that they improve the quality of life; the value of a search, therefore, is measured according to contributions that improve the physical, relational, and cultural aspects of life.

The world of education is saturated with abstract theories that crumble in front of the solidity of the facts. For this reason, to construct theories that are actionable is imperative to provide strong, clear direction for research goals. For pragmatic reasons, the degree of significance of a search must be assessed in accordance with the ethical intentions that guide it, as research should be designed primarily to improve quality of life. On one hand, academic research will produce greater knowledge of something regardless of whether that knowledge has a utility or purpose. On the other hand, education requires knowledge that is rooted in real-world applications and basic good sense. Investigations that are pragmatic are epistemologically necessary, allowing understanding of pedagogical thinking and realizing the actual concrete actions that teachers take in an educational setting. This is the only way academic research on this subject will be anchored in solid ground—a base that's required for effective research questions.

Dewey (1929) believed that teachers (what they do, and what they think they do) should be the focus of educational research in school. Based on this indication, there are many studies that seek to bring forth evidence of the culture within school by observing the daily practice of teachers and listening to them talk about their work and think about it subtended (Ayers, 1989; Johnson and Golombeck, 2002). In the classroom, an educational culture takes shape that is very different from what is stated in books about education. Therefore, in the absence of documentation consistent application of teacher training that leads to the creation of a certain culture takes place through inefficient means, because it takes advantage of a knowledge that exists outside the world of teaching practice.

With this background in mind, the questions that guided this study were:

Does education research conducted in the context of childhood education have a transformative aim that leads to positive changes in children's educational settings, and on their quality of life?

What are the implications—and what is the utility—of

this research in terms of professional development for teachers?

Compared to other means of developing professional skills, do such studies provide useful suggestions for teaching practice?

## METHODOLOGY

### Method and Procedure

A systematic literature review was conducted (Petticrew and Roberts, 2006). In order to perform the systematic review, six stages were developed. The first stage is the definition of research questions. Research questions are:

1. What are the implications—and what is the utility—of this research in terms of professional development for teachers?
2. Compared to other means of developing professional skills, do such studies provide useful suggestions for teaching practice?

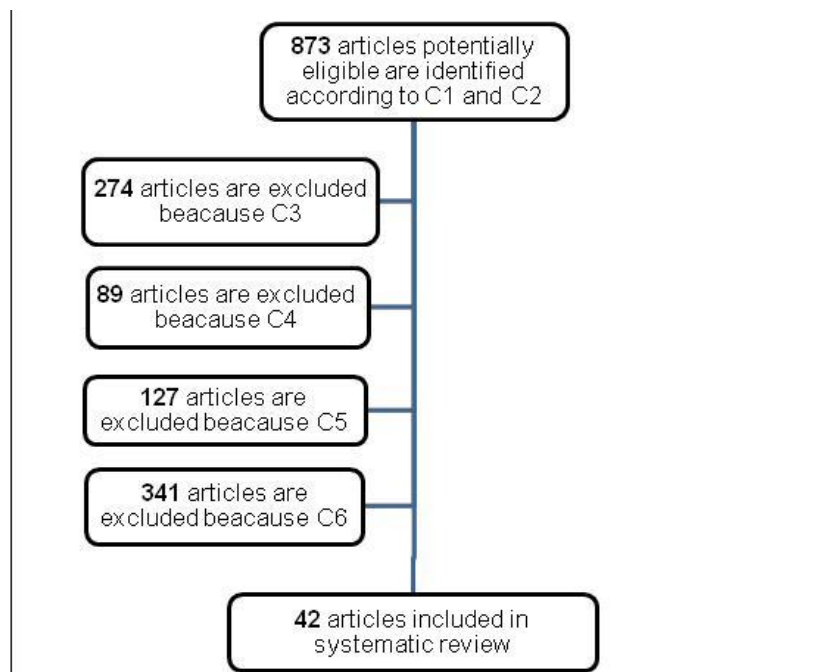
These research questions are part of a wider study about education research conducted in a childhood setting. For this article, the focus was limited to the usefulness of the research for practitioners.

The second stage is the identification of potential studies and data sources. The articles to be analyzed were selected through searching the hard copies of key journals. The four selected journals represent different scientific disciplines that are essential for the development of a pedagogical vision: anthropology, sociology, education, and psychology. The selected journals are peer reviewed and have been chosen in relation to their affinity to selected disciplines and topics (research in childhood contexts), to impact factor, and to their accessibility. The journals selected are:

*Anthropology and Education Quarterly*, *Childhood*, *Early Childhood Research Quarterly*, and *Child Development*.

The next stage was to define the inclusion/exclusion criteria as follows:

- Criterion 1 (C1): the articles were published in selected journals.
- Criterion 2 (C2): the articles have been published over the years 1990/1991, 2000/2001, 2010/2011.
- Criterion 3 (C3): the article describes empirical research.
- Criterion 4 (C4): the research involved children as participants.
- Criterion 5 (C5): the age of the participant children was between 3 and 13 years.



**Figure 1.** Process of selection of articles

- Criterion 6 (C6): the article provides information about the usefulness of research in improving the professional practice of teachers.

### Objects of review and methods of analysis

According to the screening criteria for the studies (Figure 1), 42 articles were included in the systematic review.

In this work, data were collected through a descriptive Figure, which allowed a deep analysis of the articles that focused on the topic and the purpose of each published work, the epistemological references, the methods and procedures used, the setting, the ethical considerations, the participants and the forms of their involvement, and the significance and practical implications of the research. This figure was completed after each article was read; each article had one figure entry.

In the last stage, the data were processed through a conceptual synthesis (EPPI Centre Guidelines, 2007) that led to the creation of a descriptive map. The map shows the significant issues that emerged from the analysis process, in particular related to the skills and competencies related to teachers' professional development.

## RESULTS

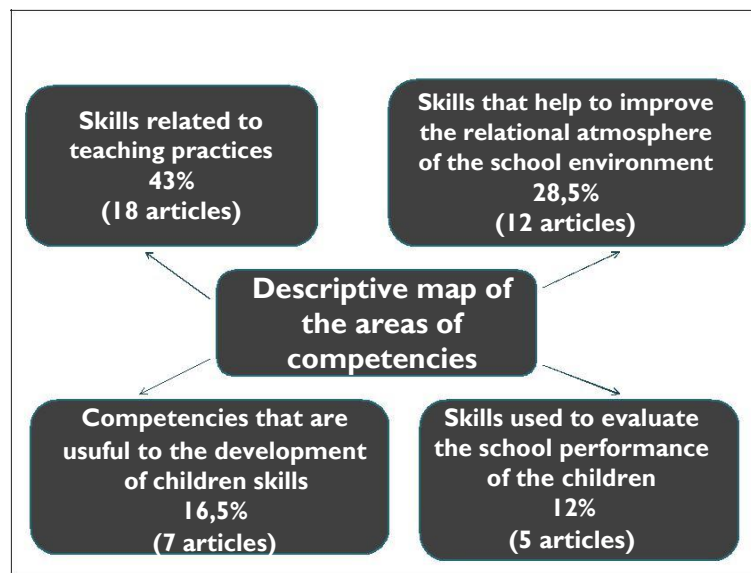
The information relevant to the training of teachers

contained in the analyzed studies related to different types of professional skills (Figure 2). In particular, the articles examined skills related to teaching practices (in 43% of studies; 18 articles). Specifically, 50% of these articles (9 articles) provided guidance with respect to the development of skills and strategies for teaching language and literacy development. Several articles detailed the development of these skills in a multicultural context. Of the remaining articles, 50% provided feedback in order to support teachers in their promotion of the academic performance of children. This extent is reached through the use of different tools (for example, the use of practices that allow children to learn from their experience).

In addition, the articles provide useful information with respect to skills to help improve the quality and the relational atmosphere of the school environment (28.5% of studies; 12 articles).

These articles provide useful suggestions to promote positive relationships between teachers and children and among children. Other researches provide practical suggestions for teachers to tackle bullying and to promote relationships and friendships among children, beyond both their cultural differences and their stereotypes and prejudices.

Indeed, in 16.5% of studies (7 articles) the implications of research useful for the practitioners concern competencies for the development of specific skills in children. In particular, these studies review strategies to develop social and emotional skills (3 articles) and self-



**Figure 2.** Descriptive map of the areas of competencies for teacher professional development

control (or self-regulation) (2 articles).

Finally, 12% of studies (5 articles) concern skills related to evaluating the performance of children in school. These studies emphasize the importance of improving teachers' assessment practices. Obtaining a good assessment of a child's skills requires an understanding of the needs of children and the ability to support them according to their performance and degree of development.

The important role of teachers in childhood education settings was another important result that emerged from the research. In all of the articles, the results are addressed to the teacher in order to give them information for their professional development. However, articles did concern themselves with circumstances in which the level of teacher involvement varied:

- in 7% of the research (3 articles), teachers were involved as co-researchers and participated directly in the research methods (ie, the process of collecting data);
- in 57% of the research (24 articles), teachers participating as key informants with respect to themselves or the children they taught; and
- in 36% of the analyzed studies (15 articles), the teachers were not research participants.

## DISCUSSION

The results from the analysis of the articles show that the areas of teachers' competencies that emerged from the

articles refer back to different sets of skills: cognitive and instrumental (useful to develop a method of teaching that enhances children's school achievements) or affective and social (useful, for example, to promote the development of children's ability to relate well to others). In the Italian context, this model is called *cognitive-style* and considers the expertise of teachers as a mix of skills developed in their practice. In addition, the authors argue that competencies generated in practice are highly contextual. For this reason, the teachers have a particular capacity for adaptation to variability (A. Ajello, V. Ghione 2000). Indeed, few research studies give explicitly practical help (instructions) to teachers. As a proof of this lack, during the review 341 articles were excluded because they did not contain information relevant to the teacher's expertise.

The information in articles that teachers find useful is often general and usually appears in a short concluding paragraph at the end of the article. More useful opportunities for the professional development of teachers occur when the teachers are actively involved in research. In that case, the research itself represents a place for reflection on their experience. In the articles that reported these experiences, the information supplied to improve their skills was specific and tied to a particular context, while maintaining its general applicability.

In conclusion, this review shows that, in recent years, renewed and increased attention has been directed at information and professional development practices related to the expertise of teachers. This was particularly evident in the *Child Development* journal. The articles selected for analysis provided information about the

usefulness of research to improve the professional practice of teachers; articles from the years 2010/2011 were considered.

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