
QUALITY OF THE TEACHING WORKFORCE – A CRITERION FOR QUALITY EDUCATION

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Abstract

The imperative of the last few years to improve students' results also concerns the improvement of the quality of the teaching workforce. However, in recent years, recruiting and maintaining quality teachers has become a challenge among some countries. In addition to the aging teaching workforce, some countries record high dropout rates among new teachers and a lack of quality teachers in high demand. There is also a concern to attract motivated and high-performance candidates to teacher training programs and to reduce qualification requirements in the certification of new teachers. Issues such as these have an impact on the quality of the resulting teaching staff who are responsible for improving student achievement. For example, the aging of teaching force leads to the loss of expert teachers through retirement. The high drop-out rates of new teachers are costly for the system and can push educational authorities to fill teacher shortages by reducing qualification requirements for new teacher certification or by assigning teachers to teach subjects or degrees for those they have not been trained. In these cases, the quality of the teaching workforce is negatively affected. This article focuses on the methodological knowledge of teachers, the dynamics of knowledge in the teaching profession to examine their insinuations for the educational process and fact based implications for educational policy.

Keywords: *Teaching workforce, Content Knowledge, Pedagogical Knowledge and Quality Education*

Introduction

As research shows, the quality of teachers is an important factor in determining student performance, even after taking into account the student's previous learning and the characteristics of the family context. Predictors of teacher quality generally include aspects such as class size, certification, type of qualification, earned titles or years of experience. Few studies have shown pedagogical knowledge as an important indicator of teacher quality. Pedagogical knowledge refers to knowledge and skills of teachers in various methods of teaching to create effective teaching and learning environments for all students. The potential of the learning subjects to inform teachers' pedagogical knowledge and, therefore, to improve pedagogical practice is significant. But do teachers incorporate this new knowledge sufficiently into their practice? The strategy crucial for teaching and learning 21st century skills, such as problem solving, association, communication and creativity, could lead to a new formation of the current teaching force and the updating of the base knowledge of the teaching profession. Again, the question is: do teachers have pertinent knowledge to teach 21st century skills? This paper sought to find answers to these questions and examined the teacher knowledge base and the dynamics of knowledge in the teaching profession.

Teachers as Specialists in Learning

Consider teaching a knowledge-rich profession with teachers as “learning specialists” are required to develop and evaluate new knowledge relevant to their central professional practice and regularly update their knowledge base to improve their practice and meet new teaching

needs. By studying the knowledge that underlies effective education and learning, we are studying how to improve teacher quality. The quality of the teacher itself is an important factor in determining success in the results of the students. In fact, the main reason for investigating teacher knowledge is to improve student achievement. On the other hand, to improve the quality of teachers, it is essential to understand what implies the professionalism of teachers. In other words, the two main themes that underlie the study of teacher knowledge are improving student achievement and teacher professionalism.

How to Recognize an Expert Teacher? What does the Professionalism of Teachers Imply?

The literature highlights many features such as extensive pedagogical knowledge, better problem solving strategies, better adaptation for different students, better decision-making, better perception of class events, greater sensitivity to the context and greater respect for students as a characteristics of expert teachers. Several studies emphasize the importance of knowledge that teachers possess, emphasizing that in addition to assimilating academic knowledge, student teaching must also incorporate knowledge derived from practical experiences and practices in the classroom. The research also shows that variations in "learning opportunities" in teacher preparation are linked to differences in student outcomes: teachers in the best performing countries tend to have more opportunities to learn content, pedagogical content and general pedagogy. While teacher knowledge is certainly a component of teachers' professionalism, professional competence involves more than simple knowledge. Skills, attitudes and motivation towards teaching also contribute to the mastery of teaching and learning. Blömeke and Delaney (2012) have proposed a model that identifies cognitive skills such as professional knowledge, general pedagogical knowledge, knowledge of contents, pedagogical knowledge of content and emotional-motivational characteristics such as motivation, self-regulation and professional beliefs about 'teaching and learning as the two main components of the professional competence of teachers.

How does the Teacher's Knowledge Influence the Results of the Students?

Research on the impact of teachers' knowledge on students' learning outcomes is poor and the few existing studies have focused on knowledge of pedagogical content or content knowledge. The following shows the implications of the studies conducted on mathematics teachers:

- Better content knowledge of teachers implies higher student results
- Better pedagogical content knowledge implies higher student results
- Pedagogical content knowledge has more impact on student achievement than content knowledge
- Only pedagogical content knowledge seems to have an impact on the quality of teaching
- Higher general pedagogical or psychological knowledge, higher the quality of instruction according to students perception

While there is a discussions and debates on the connection between teacher knowledge and quality education for a long period of time, there is a lack of empirical research to demonstrate this hypothesis or even to link knowledge with student learning. The studies examined show that although much research is still needed to fully support this relationship and to test a trans-cultural conceptualization of general pedagogical knowledge, research so far is beginning to show that teachers' general pedagogical knowledge is relevant to understanding quality teaching as is understood by its impact on students' performance based on learning.

Knowledge Base of Teachers

Indulging teacher knowledge is a complex issue that involves conceptualising the main underlying phenomena, such as the teaching and learning process, the concept of knowledge, and the way in which teacher knowledge is put into practice in the classroom. The following is a brief description of these problems.

What do we Know about the Teaching and Learning Process?

There are several models that capture the complex process of teaching and learning. Some models perceive learning as a change in the student's experience or knowledge resulting from a change in the student's environment. Some approaches consider the teaching-learning process only from the point of view of teaching, while others consider the student's contribution to the process as well. The latest models indicate that the students' factors are part of and are interdependent with the learning process of teaching. These models imply that the knowledge of a teacher goes beyond the simple knowledge of the content and management of the classroom, and must also include the knowledge of students and learning.

What do we understand from the Teacher's Knowledge?

The teachers' pedagogical "knowledge base" includes all the cognitive knowledge necessary to create effective teaching and learning environments. Research suggests that this knowledge can be studied. However, identifying the content of this knowledge base is a complex problem. Most studies use the distinction between declarative ("know that") and procedural ("know-how") knowledge from cognitive psychology as a theoretical basis. This approach is relevant because it focuses on understanding how knowledge relates to behavior or, in other words, the quality of teaching performance. The first key study on teacher knowledge (Shulman, 1987) ranked teacher knowledge in 7 categories, including the concepts were: general pedagogical knowledge (principles and strategies of management and organization of the class that they cut) and knowledge of pedagogical content (knowledge that integrates knowledge of the content of a specific topic and pedagogical knowledge for teaching that particular topic). In contrast, general pedagogical knowledge has not been the subject of many research studies, although several studies indicate that it is essential for the development of quality teachers. Some models of

general knowledge on teaching methodologies merge pedagogical and psychological aspects, while others do not explain the psychological characteristics. Psychological components explain the fact that learning takes place in a social context and successful learning depends on the general cognitive and affective characteristics of each student. The main conceptual problem that arises is whether we can develop a transculturally valid instrument of teacher knowledge. Because the way in which the brain processes information must be independent of the cultural context, to adapt a cognitive psychological teaching and the learning approach, we can assume that there is no basic pedagogical knowledge to create situations of learning teachers and independent of culture. This hypothesis, in fact, has been demonstrated in studies that show that a standardized tool designed to investigate general pedagogical knowledge is culturally valid.

How does the teacher's knowledge in the classroom work?

Investigating the knowledge of teachers as "learning specialists" implies understanding how this knowledge works in the teaching-learning process; More specifically, as teachers apply their knowledge to make decisions, for example on planning the lesson or making judgments on the ground in the classroom. A series of research studies conceptualizes the teaching profession as a "profession of clinical practice" and compares it to the medical profession. Some argue that the decision is actually a basic teaching of skills: teachers make decisions regularly while processing cognitively complex information about the student to decide alternatives to increase their understanding. A review of the different models that describe the decision making process of teachers shows that the factors influencing the decisions of school teachers include antecedent conditions, such as students, the nature of the educational task, the class and the environment, which combine with the characteristics of teachers and cognitive processes. Impact the pedagogical decision taken. Decision making is a cyclical process because the pedagogical decisions in turn influence the antecedent conditions. The empirical research that investigates how teacher knowledge is used in decision making seems to suggest that to make informed learning decisions, teachers must be able to analyze and evaluate specific learning episodes, combined with contextual and situational factors, and to connect all this information to your specialized knowledge of the teaching-learning process to guide the subsequent teaching actions. Therefore, making good pedagogical decisions depends on the quality of the pedagogical knowledge that the teacher has.

Conclusion

It is expected that the learning specialists (Teachers), process and evaluate new knowledge pertinent to their fundamental professional preparation and regularly update their knowledge base to improve their practice and meet new teaching needs. Therefore, based on the pedagogical knowledge of teachers and the dynamics of knowledge in the teaching profession it is essential to implement it in your training process in order to benefit the students of the future society.

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