



# A longitudinal study of induction on the acceleration of growth in teaching quality of beginning teachers through the eyes of their students



Ridwan Maulana<sup>\*</sup>, Michelle Helms-Lorenz, Wim van de Grift

Department of Teacher Education, University of Groningen, The Netherlands

## HIGHLIGHTS

- We examine changes in teaching quality during the first three years of teaching.
- We explore personal and contextual factors affecting perceived changes in teaching quality.
- Teaching quality increases during the first three years of teaching.
- Changes in teaching quality differ between beginning teachers.
- Certification, gender, and induction programs explain changes in perceived teaching quality.

## ARTICLE INFO

### Article history:

Received 22 September 2014

Received in revised form

5 June 2015

Accepted 7 July 2015

Available online 6 August 2015

### Keywords:

Teaching quality

Beginning teachers

Multilevel growth curve modelling

Student perceptions

Secondary education

## ABSTRACT

This study examines the development of beginning teachers' teaching quality during the first three years of teaching. Schools were randomly assigned to an experimental condition, to develop support programs (induction) for beginning teachers. Induction focused on personal coaching and the enhancement teacher autonomy and connectedness. Analyses were based on a total sample of 276 beginning teachers and 4932 students from 63 schools over the course of three years. Students perceived more rapid teaching quality increases over time in the experimental condition compared to the control condition. Certification status, gender, and induction programs explain differences (and changes) in perceived teaching quality.

© 2015 Elsevier Ltd. All rights reserved.

## 1. Introduction

The improvement of students' learning and outcomes is and continues to be a global educational concern. Teachers, who are seen as central figures in promoting students' academic performance to the highest level possible, are and have been a major focus of educational research. Research has consistently shown that a significant factor for lessening students' behaviour problems and improving their academic gains is through the development of teaching quality (Alderman & Nix, 1997; Darling-Hammond, Chung, & Frelow, 2002; Kyriakides, Creemers, & Antoniou, 2009).

This suggests that students can benefit more from having effective teachers. When students are taught by less effective teachers, they may not reach their full potential in learning.

In everyday practice, schools employ both experienced as well as beginning teachers in order to meet the demand of teaching staff. Unfortunately, research indicates a general gap in teaching quality between experienced and beginning teachers. Generally, teaching quality of beginning teachers is lower compared to that of experienced teachers (Maulana, Opendakker, Stroet, & Bosker, 2012). Beginning teachers tend to face difficulties in providing a supportive learning climate, managing the classroom effectively, displaying clear instruction, activating students' learning, attending to differences between students' needs, and teaching students how to learn effectively (Maulana et al., 2012; Maulana, Helms-Lorenz, & Van de Grift, 2015). Beginning teachers lack the conceptual

<sup>\*</sup> Corresponding author. Department of Teacher Education, Grote Kruisstraat 2/1, 9712 TS Groningen.

E-mail address: [r.maulana@rug.nl](mailto:r.maulana@rug.nl) (R. Maulana).

understanding and the abilities to extend the lessons beyond the basics (Wilson, Floden, & Ferrini-Mundy, 2002). Hence, one may expect that the behaviour of beginning teachers may not be as effective as that of experienced teachers. Indeed, studies in the United States reveal that experienced teachers produce higher student achievement compared to inexperienced teachers (Greenwald, Hedges, & Lane, 1996; Rivkin, Hanushek, & Kain, 2005).

However, less is known about how beginning teachers' teaching quality develops over time. From the perspective of teacher education and in-service teacher professional development programs, it is important to understand more about how beginning teachers' teaching quality develops and which teaching skills to support to facilitate development over time. If changes in teaching quality differ between beginning teachers, then this will inform school mentors and teacher educators regarding the need to attend to individual beginning teacher differences in their professional trajectory over time. Furthermore, understanding changes in teaching quality could give researchers clues regarding the peak moment of beginning teachers' teaching quality so effective adjustments regarding interventions for improving teaching behaviour can be made. This suggests that the nature of interventions aiming at the improvement of teaching quality may need to be adjusted over time. Additionally, it is inconclusive which factors contribute to explaining differences and changes in beginning teachers' teaching quality. Undoubtedly, knowing significant factors for (the development of) beginning teachers' teaching quality is useful information for teacher education and in-service teacher professional development program.

In order to extend the knowledge base of the development of teachers' teaching quality, the aims of the present study were to investigate variability and change, and the effects of personal and contextual factors (particularly induction programs to support teachers' professional development in teaching) on teaching quality during the first three years of professional teaching.

## 2. Theoretical framework

### 2.1. Teaching quality

Teaching quality covers some or all aspects of teacher-student relationships in the classroom (Cornelius-White, 2007). Teaching and teacher effectiveness and learning environments research, which serve as theoretical frameworks for studying teaching quality in the current study, have shown that the quality of teaching practices are significant predictors of students' learning and outcomes (Creemers & Kyriakides, 2008; Hattie, 2012). In contemporary conceptualizations of teaching and learning processes, both cognitive and motivational aspects are taken into account.

Ko, Sammons, and Bakkum (2013) present a comprehensive overview of definitions of effective teaching ranging from narrow to broad encompassing definitions. Our operationalization of effective teacher behaviour corresponds to their first definition: The effectiveness of observable behaviours seen during classroom observation of a typical lesson. This aspect of teacher effectiveness is the core of all the mentioned broader definitions. The current study focusses on the effects of induction support on observable behaviour in the classroom of beginning teachers. For this goal, the least broad definition suffices. We intend to measure the behavioural effects of support in the classroom, therefore our operationalization of teaching quality is narrower than the broader definition of effective teaching we support, even though we fully acknowledge the scope of the above mentioned aspects of effectiveness of teaching and ways to measure it.

Evidence-based teaching practices have their historical roots in

learning theories, put forward and studied for many more decades than studies concerning effective teacher behaviour. Learning theories (behaviorism, cognitive theories and constructivist<sup>1</sup> theories) stem from different (ancient) epistemological viewpoints (Relativism, Objectivism) defending the world as either *constructed* or as *given* respectively (Yeaman, Hlynka, Anderson, Damarin, & Muffoletto, 1996). The instructional principles derived from the learning theories lead to different manifestations of instruction. Superficially, rival theories seem to lead to opposing practices. Recent research has been triggered by these differences in practice, leading to questions as: what works best, and under which circumstances do certain teacher practices lead to higher student outcomes (teaching effectiveness)? The meta-analysis of Hattie (2009) revealed that teaching practices stemming from diverse learning theories are effective (e.g., mastery learning of the behaviouristic learning theory and meta-cognitive strategies derived from the cognitivist learning theory and problem-solving teaching derived from the constructivist approach). This evidence adds to the validity of the learning theories and might stimulate the refinement and integration of the valuable insights of these theories in the future. This might give way to a higher order eclectic learning theory accommodating more than one learning theory.

Research suggest that social contexts such as school and departmental leadership/culture (Little, 1982), characteristics of school population and changes in social conditions (Hutchings, Menter, Ross, Thomson, & Bedford, 2000), and professional development opportunity (Day, 1999) affect teaching quality. Furthermore, teacher intrapersonal aspects play a significant role for teachers to achieve, maintain, and improve teaching practices. Those aspects include motivation and morale (Troman & Woods, 2001), passion for teaching (Day, 2004), adaptability for change (Fullan & Hargreaves, 1992), age and developmental phase (Fessler, 1995), self-efficacy (Rosenholtz, 1989), and satisfaction through students' progress and achievement (Tschannen-Moran, Hoy, & Hoy, 1998). In short, social environments and teacher intrapersonal aspects are important factors determining teacher effectiveness.

### 2.2. Evidence-based teaching practice domains

Based on reviews of evidence-based effective teachers' behaviour research, Van de Grift (2007; Maulana, Opdenakker, Stroet, and Bosker, 2013) identified six observable domains of teaching quality. These domains include safe and stimulating learning climate, efficient classroom management, clarity of instruction, activating learning, adaptation to students' learning needs, and teaching learning strategies. The six domains of teaching quality mentioned above are also in accordance with other models and empirical findings (Danielson, 2013; Ko et al., 2013; Pianta & Hamre, 2009). Five of the 10 effective behaviour domains found by Ko et al. (2013) coincide with the 6 above mentioned domains.

Safe and stimulating learning climates refer to aspects of teacher-student relationships such as creating a safe and relaxing classroom climate, showing respect to students and ensuring that students respect the teacher and their peers, and encouraging self-confidence of students (Maulana et al., 2012; Cornelius-White, 2007; Hattie & Clinton, 2008; Smith, Baker, Hattie, & Bond, 2008; Teodorovic, 2011; Willms & Somer, 2001). Effective classroom management is another important domain of teaching quality.

<sup>1</sup> It goes beyond our scope to discuss the status and quality of the learning theories, rather our aim is to argue that different lines of thought, concerning how we learn, lead to different forms of instruction. These different forms of instruction have proven to be more or less effective.

Download English Version:

<https://daneshyari.com/en/article/373939>

Download Persian Version:

<https://daneshyari.com/article/373939>

[Daneshyari.com](https://daneshyari.com)