The Professional Teacher Educator

Roles, Behaviour, and Professional Development of Teacher Educators

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and

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This book is a review of more than twenty years of international research on teacher educators. It offers a solid overview of what is known about the professional roles, professional behaviour and professional development of teacher educators. A systematic analysis of the focus, methods and data sources of 137 key publications on teacher educators make this book into an important reference work for everyone interested in the work of and research on teacher educators.

There is a growing consensus that teacher educators largely determine the quality of teachers and hence, the quality of education. Through this book, Lunenberg, Dengerink and Korthagen provide not only insights into the various roles of teacher educators and the complexity of their work, but they also discuss building blocks for ongoing structured and in-depth professional development.

The authors clarify that if we wish to take ‘being a teacher educator’ seriously, it is imperative that we build our understanding on research data. The book shows that although the number of studies on teacher educators is growing, the research in this field is still scattered. The authors highlight the need to create a coherent research programme on teacher educators and provide concrete suggestions for such a programme.

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Rationale:
This series purposely sets out to illustrate a range of approaches to Professional Learning and to highlight the importance of teachers and teacher educators taking the lead in reframing and responding to their practice, not just to illuminate the field but to foster genuine educational change.

Audience:
The series will be of interest to teachers, teacher educators and others in fields of professional practice as the context and practice of the pedagogue is the prime focus of such work. Professional Learning is closely aligned to much of the ideas associated with reflective practice, action research, practitioner inquiry and teacher as researcher.
The Professional Teacher Educator

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By

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## CONTENTS

Foreword                                 vii

By John Loughran                          

Chapter 1. Introduction: Why This Book?    1
  1.1 Context and background               1
  1.2 Goals of this review study and research questions  2
  1.3 Relevance for research               2
  1.4 Practical relevance and relation to other developments  3

Chapter 2. Conceptual Framework           5
  2.1 Teacher educator                     5
  2.2 Professional role                    6
  2.3 Professional behaviour               6
  2.4 Critical features                    7

Chapter 3. Method                        9
  3.1 Eight steps                         9
  3.2 The final database                   16

Chapter 4. Results: Characteristics of the Profession 19
  4.1 Six roles                           19
  4.2 Teacher of teachers                 22
  4.3 Researcher                          34
  4.4 Coach                               44
  4.5 Curriculum developer                51
  4.6 Gatekeeper                          55
  4.7 Broker                              58

Chapter 5. Conclusions and Discussion. Recommendations for Research and Practice 63
  5.1 Summary and conclusions             63
  5.2 A reflection                        68
  5.3 Recommendations                     75

Chapter 6. The Dutch Case: Quality Improvement in the Profession of Teacher Educators 79
  In co-operation with Saskia Attema-Noordewier, Janneke Geursen, and Bob Koster
  6.1 Introduction                        79
  6.2 Professional standards and registration procedure  80
  6.3 A knowledge base of teacher educators  88
CONTENTS

6.4 A programme for teacher educators 95
6.5 The future of the Dutch case 102

Appendix: Overview of the Selected Studies and Their Characteristics 105

References 161

About the Authors 165
SERIES EDITOR’S FOREWORD

In recent times there has been an increasing focus in the academic literature on the nature of teacher education, in part as a response to the ways in which education bureaucracies around the world have sought to position the field and its work. However, what has often been overlooked has been the role of teacher educators in the teacher education enterprise (Murray, 2011) as program structure, organisation, expectations and purpose have tended to dominate. It is almost as though, like teaching, that the work of teacher educators has been superficially perceived as relatively straightforward and easy to understand. As a consequence, the purpose of teacher education, the sophisticated knowledge, skills and ability necessary to do that work well, are either overlooked or, sadly, ignored. Through this book, Lunenberg et al. have responded to that situation by offering insights into the important work of teacher educators. In so doing, they begin to articulate crucial aspects of what it means to be a teacher educator and to create real opportunities to better understand what that means in relation to the professional development of teacher educators themselves.

In order to set the scene for what is their examination of the ‘roles, behaviour and professional development of teacher educators’, the authors outline a program of study that makes clear not only how they approached their review the way they did, but also why it is important; both to them as researchers and to the profession of teacher educators more generally. The significance of this work should not be quickly glossed over. Because teacher education is ubiquitous and an integral component of education systems world-wide, concentration on the organisation of teacher education has overshadowed the development of deeper understandings of those that work within the system. With this book, the way in which teacher educators work, how they develop, what it is they ‘know and are able to do’, and how their professional learning might be supported and enhanced, comes to the fore in interesting and informative ways. It begins to frame the ways in which many individual teacher educator’s studies can be brought together to create the big picture of teacher education and acknowledge the fundamental purpose of pedagogy in ways called for by scholars such as Berry (2007), Brandenburg (2008) and Russell (2010).

Through this book, the authors make clear that if we wish to take ‘being a teacher educator’ seriously, then it is imperative that data drives our understanding and, that evidence lies at the heart of the conclusions we draw. As they state, ‘the goal of the study was to arrive at a solid overview of what is known about the professional roles of teacher educators, the related professional behaviour, and the professional development of teacher educators regarding these roles and the accompanying behaviour’. Their study was carried out with the support of a grant from The Netherlands Organisation for Scientific Research (NWO) and their
FOREWORD

analysis is detailed, thoughtfully portrayed and clearly presented. In being sponsored by NWO, it also illustrates a developing acceptance of the need to study the field in more systematic and meaningful ways and to go beyond teacher education as only a preparatory step in becoming a teacher.

In reading this book, the strength of the authors’ knowledge of the field is immediately obvious. They analyse the literature in ways that offer a range of engaging perspectives on the nature of teacher educators, their work and their professional development. They bring to the surface that which might be described as the status-quo in the profession whilst also highlighting issues and concerns regarding how some teacher educator roles are constructed, perceived and performed. Through their analysis, Lunenberg et al. shine a light on aspects of the field that require more concerted research efforts and highlight the value in so doing. In essence, they begin to set an agenda for research and practice that might make a difference for teacher educators, the ways in which they work, and the manner in which they develop as professionals.

This book demonstrates that the professional development of teacher educators is gathering attention and building in momentum. Lunenberg et al.’s study creates a productive way of thinking about what professional development of teacher educators might mean and how the outcomes of such work might be employed so that it is useful and applicable for the profession. An obvious outcome of their focus on studying the professional development of teacher educators is that it also rekindles interest the nature of teaching and learning about teaching in new ways. Their study helps to refocus attention on the pedagogy of teacher education and reminds us all about how important that is as a base for professional knowledge of, and practice in, teacher education (Heaton & Lampert, 1993; Korthagen & Kessels, 1999; Loughran, 2006; Ritter, 2007).

The professional development of teacher educators appears a natural flow on from the outcomes of over two decades of work in the field of self-study of teacher education practices (S-STEP, see Hamilton et al., 1998); a field in which the authors themselves have been continually involved. As S-STEP has become so much more a part of the educational teaching and research landscape, the breadth of work produced by that community is now at such a stage that new questions about teacher education are emerging that demand more organised and programmatic responses. Through a community such as S-STEP, the challenges, ideas, issues and possibilities pertaining to the professional development of teacher educators may be supported and pursued so that a coherent and constructive agenda for development might emerge. Lunenberg et al. are very well placed to support and pursue such an agenda.

This book has set the scene for the next steps in making the work of teacher educators more public, accessible and understandable. The complex and sophisticated work of teaching about teaching cannot be dismissed and simplistic views and approaches to teacher education should not avoid scrutiny. The challenge now is to ensure that the groundwork established through this book is built upon in appropriate ways so that it might have genuine impact on the thinking about, and practices of, teacher education in institutions generally but in their
faculties of education more specifically. I have found this book to be most engaging and thought provoking; I trust the same occurs for you.

John Loughran
Monash University, Australia

REFERENCES

1. INTRODUCTION: WHY THIS BOOK?

"Teachers of teachers – what they are like, what they do, what they think – are typically overlooked in studies of teacher education."

(Lanier & Little, 1986*, p. 528)

1.1. CONTEXT AND BACKGROUND

This is a book about teacher educators and their profession. Until now, such a book has been rather unique, as for a long time only limited attention was paid to the important work of teacher educators. However, after the above observation by Lanier and Little in the 1980s, a fundamental shift has taken place. Since the 1990s, the crucial role of teacher educators in the educational chain has gradually received more attention in research, practice, and educational policy (see, e.g., Koster, Brekelmans, Korthagen, & Wubbels, 2005). Nowadays, there seems to be a quite general consensus that, to a large degree, teacher educators determine the quality of teachers and that these teachers are a crucial factor in the quality of primary and secondary education (Liston, Borko, & Whitcomb, 2008). Hence, it is important that teacher educators are able to function at a high professional level.

What does this mean? And do teacher educators meet this requirement?

Notwithstanding the increased attention to teacher educators, the literature does not give clear answers to such questions (Verloop, 2001*). Martinez (2008) states:

Little systematic research has been undertaken to inform us about fundamental characteristics of the professional lives of this occupational group – their qualifications, their recruitment, their career pathways into and through the academy, their teaching and research practices, the problems they encounter, or their professional development needs and practices. (p. 35)

However, especially during the last decade, many publications have offered partial answers to questions about the characteristics of the profession and the behaviour of teacher educators. Hence, if we wish to take the profession of teacher educator seriously, this situation asks for a solid analysis and synthesis of what is known in this field. This was the incentive to conduct the review study described in this book.2

This study fits into an international trend. Various authors have emphasised that for too long the profession of teacher educators has received too little attention. Worldwide, a growing number of studies on teacher educators are now being published. For example, within the Association of Teacher Educators (ATE, USA) as well as within the Association of Teacher Educators in Europe (ATEE), there is an ongoing debate about the importance of further professional development of teacher educators, not only for enhancing the quality of their work, but also for elevating their status and position as a professional group.

This review study is also relevant, because the professional community of teacher educators is rather diffuse, which until now made it difficult to arrive at a
1. INTRODUCTION: WHY THIS BOOK?

Clear and solid framework for the profession. As Lunenberg (2010*) states, teacher educators form a rather heterogeneous group. One becomes a teacher educator by being appointed as such. There is no formal educational route, tied to admission requirements for the profession, to becoming a teacher educator (Cochran-Smith, 2003). Many teacher educators, but not all, started their career as a teacher (Dinkelman, Margolis, & Sikkenga, 2006; Berry, 2007*). We will return to this issue in Section 2.1.

1.2. GOAL OF THIS REVIEW STUDY AND RESEARCH QUESTIONS

The goal of the review study was to arrive at a solid overview of what is known about the professional roles of teacher educators, their related professional behaviour, and the professional development of teacher educators regarding these roles and the accompanying behaviour. We will also analyse what is known from the literature about critical features determining the professional roles, the accompanying professional behaviour, and the professional development of teacher educators.

The following research questions have guided this study:
1. What professional roles of teacher educators can be identified?
2. What are the critical features determining the professional roles of teacher educators and the accompanying professional behaviour?
3. What are the critical features determining the development of the professional roles and the accompanying professional behaviour of teacher educators?

This study focuses on the professional roles and the professional behaviour of individual teacher educators. This implies, for example, we do not draw conclusions about the level of professionalism of the community of teacher educators as a whole, although some of our findings do touch upon this issue.

On the basis of our analysis, we also give an overview of blind spots in the current research and we offer suggestions for further research. After our final conclusions and discussion, we also offer suggestions for practice.

1.3. RELEVANCE FOR RESEARCH

As we mentioned, already in the 1980s, Lanier and Little (1986*, p. 528) stated that there was too little knowledge about the work of teacher educators. One of the first and leading publications having the teacher educator as its object of study was the book *The lives of teacher educators* by Ducharme (1993*). In the 1990s, worldwide more studies appeared about teacher educators and their work, and there was a growing acknowledgment that the profession of teacher educator should meet certain professional requirements. In this respect, an important development was the formation, in 1993, of a Special Interest Group of the American Educational Research Association (AERA), named Self-Study of Teacher Education Practices, or briefly S-STEP (Russell, 2010*). Zeichner (1999*) maintains that this may have been the most important development ever to the research in the area of teacher education. A publication by Russell and Korthagen (1995*), named *Teachers who*
teach teachers, brought together experiences from members of the Special Interest Group. As such, it offered in-depth insights into the daily work and struggles of teacher educators world-wide. In 2004, the Special Interest Group published the International Handbook of Self-Study of Teaching and Teacher Education Practices (Loughran, Hamilton, LaBoskey, & Russell, 2004*), which is an extensive and rich collection of studies in this area, with much attention to the practical work of individual teacher educators and their professional development. This means that a point had been reached at which, for the first time, there was a broad and in-depth overview of what teacher educators actually do and think and, most of all, what they struggle with.

Hence, it is only since the beginning of the 1990s that we know more about the teacher educator (Koster et al., 2005). This leads to the need for a clear and research-based overview of what is known to date about the professional functioning of teacher educators and the factors contributing to this, as well as to their further professional development. Until now, such an overview has been missing.

In 2005, AERA published the review study Studying Teacher Education (Cochran-Smith & Zeichner, 2005*). This contains an analysis and synthesis of the available empirical research relevant to policy and practice in teacher education. However, some topics relevant to teacher education are not discussed in this AERA study, such as an historical analysis of teacher education and in-service teacher education (Cochran-Smith & Zeichner, 2005*, pp. 59-60). Also absent is a clear perspective on the roles and behaviour of individual teacher educators and on factors determining their quality and their development, which is exactly what the present review study focuses on. Hence, the present review fills in a blank in the available research. Moreover, the AERA study was limited to research carried out in North America, whereas we have adopted an international perspective.

1.4. PRACTICAL RELEVANCE AND RELATION TO OTHER DEVELOPMENTS

The significance of this review study may be important to practice and to society as a whole, as teacher educators increasingly fulfil a crucial role in the educational chain (Liston et al., 2008). Moreover, there is much emphasis nowadays on the fact that the profession of teacher educator is a specific profession, which differs from the profession of teacher in primary or secondary education (Murray & Male, 2005). Also, many researchers have noted that teacher educators need support in their work in order to develop their professional behaviour (Cochran-Smith, 2003; Koster et al., 2005; Snoek, Swennen, & Van der Klink, 2011; Swennen, Jones, & Volman, 2010). In this respect, this review study offers a framework for such support. Given the fact that many teacher educators are constantly struggling with time constraints, this book could be a powerful instrument, as it offers a brief overview of the most important research in this area.

This review study also fits into a trend in the Netherlands, which has taken place during recent years. As we will further discuss in chapter 6, important steps have been taken regarding the professional development of teacher educators. First,
1. INTRODUCTION: WHY THIS BOOK?

during the previous decade, the Dutch association of teacher educators developed a registration procedure. Teacher educators choosing to pass through this procedure, undergo a peer assessment (Koster, Dengerink, Lunenberg, & Korthagen, 2008; Koster & Dengerink, 2008). In addition, projects were started to promote self-studies by teacher educators (see, e.g., Lunenberg, Zwart, & Korthagen, 2010). Also, in co-operation with the Dutch association of teacher educators, VU University in Amsterdam developed a knowledge base for the profession. Such a knowledge base for teacher educators is rather unique in the world. With this review study, we aim at putting an even stronger theoretical basis under this knowledge base, which could possibly also lead to further adaptations in the knowledge base itself.

Finally, based on the knowledge base for teacher educators, a professional development trajectory for teacher educators was developed in the Netherlands. This trajectory is linked to the registration procedure of the Dutch association of teacher educators. Both institution-based and school-based teacher educators participate in this trajectory, which attracts quite some interest from the professional community. This is a development which is important as, internationally, structured trajectories for teacher educators are rare, and if they exist at all, they are often rather limited in scope. On the basis of an extensive study in the 1990s, Wilson (1990*) concluded that in Europe, systematic training or coaching of teacher educators was almost completely missing. He rightly added that this situation was highly remarkable in an area where professional development has always been the operative word. Ten years later, the situation had not changed much, as noted by Buchberger, Campos, Kallos, and Stephenson, (2000*). We believe that this review study could offer the building blocks for structured and in-depth trajectories for teacher educators. As such, it could contribute to a higher level of professionalism and positive outcomes for education as a whole.

NOTES

1 References marked with * are additional to the database of this review study. (See Chapter 3 for an explanation.) A list of these references can be found at the end of this study.

2 The review study has been carried out with a grant of The Netherlands Organisation for Scientific Research (NWO).
In this chapter, we explain the core concepts used in this review study. We discuss how we define ‘teacher educator’, ‘professional role’, ‘professional behaviour’, and ‘critical features’.

2.1. TEACHER EDUCATOR

Teacher educators are a heterogeneous group. Not only do they come from different backgrounds, but they also work in different settings (Lunenberg, 2010*). Some work in an institution for teacher education for primary education, some in a teacher education institution for secondary education. Others work in teacher education institutions for specific fields such as the arts, technology, or agriculture. Moreover, there is a growing group of school-based teacher educators co-operating with those who are institution-based and with their students (Van Velzen & Volman, 2009). Teacher educators also have a variety of tasks. They teach a subject or pedagogy, and support students who do field work. In addition, teacher educators are increasingly expected to develop and carry out courses for experienced teachers and to do research (Koster, Dengerink, Lunenberg, & Korthagen, 2008).

Koster (2002*) states that it is difficult to find a satisfying description of what a ‘teacher educator’ is. He cites Carter (1984*, p. 126-127), who defines a teacher educator as ‘a faculty member in a tenure track who had taught at least one required undergraduate professional education course during the preceding twelve months’. Koster (2002*, p. 7) himself formulates the following definition: ‘A teacher educator is someone who teaches at a teacher education institution or supports students’ field work in schools, and contributes substantially to the development of students towards becoming competent teachers’.

Koster’s definition evokes three questions. Firstly, the word substantial is ambiguous. Secondly, the tasks and responsibilities of school-based teacher educators have been extended during the previous decade. And thirdly, we also want to include in our definition teacher educators responsible for courses for experienced teachers, especially because the boundaries between initial teacher education and professional development courses are fading more and more.

Therefore, in this review study, we define teacher educators as: **all those who teach or coach (student) teachers with the aim of supporting their professional development.**

Hence, we include all those who, in teacher education institutions and in schools, are responsible for teaching and coaching future, beginning and experienced teachers.
2. CONCEPTUAL FRAMEWORK

2.2. PROFESSIONAL ROLE

Van Doorn and Lammers (1984*), as well as De Jager, Mok, and Sipkema (2004*) define a role as a cluster of more or less stringent expectations of the behaviour of a person in a certain position. These expectations may be those of a professional group, an organisation in which a person works, or of society. They can be – in part – formally established, for example in a professional standard. More important, however, is what is in practice expected of a person in a certain position, and what is demanded from this person by members of his or her working environment.

In this review study, we use the concept professional role. ‘Professional’ refers to a complex of systematically organised and transferable theoretical knowledge (see for example Knoers, 1987*, p. 6). The use of the adjective ‘transferable’ emphasises that the teacher educator should be able to make theoretical knowledge explicit.

We define the concept ‘professional role’ as: a personal interpretation of a position based on expectations from the environment and on a systematically organised and transferable knowledge base. (Note: In the following chapters, we will often abbreviate ‘professional role’ to ‘role’.)

The concept ‘professional role’ should not be confused with the concept ‘professional identity’, which has recently become more popular in the literature. Klaassen, Beijaard, and Kelchtermans (1999*, p. 337) describe professional identity as ‘relatively stable views, reflection patterns on professional behaviour, and the accompanying self-image’. So, the concept ‘professional identity’ mainly focuses on personal views and self-images, whereas the concept ‘professional role’ mainly focuses on position and expectations from the environment.

2.3. PROFESSIONAL BEHAVIOUR

Knoers (1987*), as well as Jansma and Wubbels (1992*), Eraut (1994*), Hoyle and John (1995*), Koster (2002*), and Verloop (2001*), emphasise that professional behaviour means behaviour based on a knowledge base. As explained above, teacher educators should be able to make this behaviour explicit. Implicit knowledge and ‘practical wisdom’ (Lunenberg & Korthagen, 2009*) are in our view not a sufficient foundation of professional behaviour.

In the medical field, among others, the attention to values and norms is also explicitly mentioned as an important aspect of professional behaviour. An ethical standard for teacher educators, however, is not yet available. Verloop (2001*) concludes that professionals have a certain amount of freedom to make their own judgment with regard to what is considered appropriate practice. The fact, however, that an ethical standard for teacher educators is still absent, does not mean that attention to ethical issues is also missing (see for example Coldron & Smith, 1999*; Beijaard, Meijer, & Verloop, 2004*).

Hence, in this review study, we define professional behaviour as: behaviour based on a systematically organised and transferable knowledge base expressing the values and norms of the professional community.
The definitions above do not completely cover the professional role and professional behaviour of teacher educators. Van Doorn and Lammers (1984*), as well as Hoving and Van Bon (2010*) emphasise that a role can be an object of discussion, also because in practice several roles are often combined. That teacher educators combine several roles seems obvious. Ducharme (1993*) uses the metaphor of a (two-faced) Janus-head, and adds that teacher educators seem to have even more than two faces: “School person, scholar, researcher, methodologist, and visitor to a strange planet” (p. 6). Such role combinations can be a source of tensions and conflict, because one has to meet several expectations and norms, which are sometimes hard to combine.

2.4. CRITICAL FEATURES

We define critical features as: features determining the quality of professional roles or professional behaviour, or determining the quality of the professional development of teacher educators with regard to roles or behaviour.

As we will explain in the next chapter, we will limit our conclusions about critical features to those features that are empirically and adequately underpinned.
3. METHOD

3.1. EIGHT STEPS

For this review study, we have used the methodological framework for a (qualitative) literature review as described by Randolph (2009*). Randolph describes eight steps, formulated as tasks that researchers have to carry out:
1. Create an audit trail;
2. Define the focus of the review;
3. Search for relevant literature;
4. Classify the documents;
5. Create summary data bases;
6. Identify constructs and hypothesised causal linkages;
7. Search for contrary findings and rival interpretations;
8. Use colleagues or informants to corroborate findings.

In this chapter, we will describe how we have applied these steps in this review study.

1. Create an Audit Trail

The aim of this first step is to carefully document all stages of the review process. We have done so and will explain below the selection of our sources and of the studies we have used in the review study. We will also describe the process of data analysis and data interpretation. Next, we will report on how we have enhanced the trustworthiness, transparency and completeness of this study through collegial collaboration. We have further underpinned these by involving an international group of experts (the ‘critical friends’, see step 8).

2. Define the Focus of the Review

The focus of our review is defined by the goal of this study and by the three research questions. These are described in Chapter 1.

3. Search for Relevant Literature

According to Randolph, step 3 is focused on searching for relevant literature. We started this search process with an orientation phase, followed by a selection phase.

Orientation phase

We started with an orientation phase in which we conducted tryouts in order to arrive at the identification of search terms, quality criteria, and a demarcation of the
publishing period, which would lead to an overview of relevant studies as complete as possible. Such an overview could help us to answer our research questions.

To begin with, we explored what would be the most relevant search terms for our study. Based on our orientation, we chose the following central search terms for this study: ‘teacher educator(s)’, ‘teacher trainer(s)’ and ‘mentor teacher(s)’. By adding the latter search term, we explicitly included in our study persons responsible for teaching and coaching student teachers in their school practice. Combining these search terms with the core concepts of our research questions (role, behaviour and professional development) proved not to be efficient. For example: the combination of the search terms ‘teacher educator’ and ‘role’ hardly provided any literature on the role of teacher educators, but mainly articles on the role of reflection in teacher education. As a consequence, we decided not to work with combinations of the three search terms that we had chosen and the core concepts as described in the previous chapter.

Next, we looked for quality criteria. We decided on limiting our main search to articles in journals recognised by the Institute for Scientific Information (ISI) or by the Dutch Interuniversity Centre for Educational Sciences (ICO). In addition to ISI, ICO recognises a few more journals dedicated to teacher education and teacher educators, for example ‘Studying Teacher Education’. The academic forum regards the quality of these journals as adequate. Among others, these journals use the quality criterion of ‘double blind review’ in judging articles.

It is more difficult to find a comparable quality criterion for books. We assume that Ph.D. dissertations do meet quality criteria, but also take note that the information from Ph.D. dissertations relevant to this review study has very often also been published in an article. We know that articles in some relevant handbooks are solidly reviewed, but in most cases books are a grey area when it comes to guaranteeing the quality.

Hence, we decided to use ISI- and ICO-articles as the primary source in answering our research questions. Where it seemed sensible, we used book publications as an additional source. These mostly proved to be books that were frequently referred to in the selected ISI- and ICO-articles. In this review study, references to additional publications are marked with an asterisk (*).

Another point of attention in this orientation phase was to determine the period of time we would focus on. We chose the period 1991-2011, because before the nineties of the previous century, hardly any studies on teacher educators had been published (as is stated by Wilson, 1990*; Ducharme, 1993*; Zeichner, 1999*; Buchberger, Campos, Kallos, & Stephenson, 2000*).

Finally, we had to decide which search engines to use. We tried out which would lead to the best quantitative and conceptual saturation. This proved to be a combination of Web of Knowledge, Science Direct and Tandfonline. The use of these three, combined with the search terms ‘teacher educator(s)’, ‘teacher trainer(s)’, and ‘mentor teacher(s)’, led to the results represented in Table 3.1.
3. METHOD

Table 3.1. Overview of search results for the terms teacher educator, teacher trainer, and mentor teacher using three search engines, for the period 1991-2011

<table>
<thead>
<tr>
<th>Search engine</th>
<th>Search terms</th>
<th>Number of (additional) hits</th>
</tr>
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<tbody>
<tr>
<td>Web of Knowledge</td>
<td>Teacher educator(s)</td>
<td>979 hits</td>
</tr>
<tr>
<td></td>
<td>Teacher trainer(s)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mentor teacher(s)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Search terms in title and subject</td>
<td></td>
</tr>
<tr>
<td>Science Direct</td>
<td>Teacher educator(s)</td>
<td>+ 139 additional hits</td>
</tr>
<tr>
<td></td>
<td>Teacher trainer(s)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mentor teacher(s)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Search terms in title, keyword and subject</td>
<td></td>
</tr>
<tr>
<td>Tandfonline</td>
<td>Teacher educator(s)</td>
<td>+ 142 additional hits</td>
</tr>
<tr>
<td></td>
<td>Teacher trainer(s)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mentor teacher(s)</td>
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<td></td>
<td>Search terms in title, keyword and subject</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1260</td>
</tr>
</tbody>
</table>

Selection phase

Starting with the 1260 articles we had found, the second phase consisted of the further selection from this body of literature. Based on the journal titles and the abstracts, we narrowed down our search using two criteria:
1. the article should have been published in an ISI or ICO-journal;
2. the teacher educator, teacher trainer or mentor teacher should be the focus of the study reported on in the article.

The choice of this second criterion was important, because there are many studies on teacher education - for example on the learning of student teachers - that contain recommendations for teacher educators, but they basically do not focus on teacher educators. Such studies were not included in our selection.

Two researchers independently used these two criteria in judging the first 300 out of the 1260 abstracts. This led to a Cohen’s Kappa of .80. Because of this high inter-rater reliability, the other abstracts were judged by only one of the researchers. In case of doubt, however, a second researcher was consulted. This selection procedure resulted in a list of 405 articles.

4. Classify the Documents

In steps 4 and 5, according to Randolph, the selected studies should be classified and summarised into a database. Randolph emphasises that this is an iterative process. We carried out these two steps as follows.

The 405 studies were read in their entirety by one of the three researchers with the aim of selecting those articles that offered information about the professional roles, the professional behaviour and the development of the professional roles or professional behaviour of teacher educators. A list was made of the relevant
3. METHOD

articles, mentioning the core concept(s) studied in these articles, and also including some additional information about the studies. We removed some studies dating back to the beginning of the nineties, in which themes related to the core concepts were mentioned, but which were obviously outdated (for example a study asking for the attention of teacher educators to the gap between theory and practice, but not offering empirical underpinning or options for behaviour). We also discovered that the criterion that an article should have been published in an ISI- or ICO-journal was not in itself a watertight quality guarantee. Hence, we also removed a few articles because of the lack of quality (for example in cases where a description of the methods used was missing or was very superficial). We found that approximately 130 articles were useful in answering our leading questions. These articles offered information about the professional role, the accompanying professional behaviour and/or the professional development of teacher educators.

5. Create Summary Data Bases

Using the lists of articles created in step 4, we summarised our findings and created a database in which for each of the selected studies we described:
1. The country or countries in which the study had been carried out;
2. The central research question(s) or the focus of the study;
3. The method(s) used;
4. The data sources;
5. The number of teacher educators that had been objects of study;
6. The number of others, for example students that had been objects of study;
7. The roles and/or accompanying behaviour on which the study provided information;
8. The professional development of roles and/or accompanying behaviour on which the study provided information.
Table 3.2 shows the format of the database.

Table 3.2. Format of the database for this study

<table>
<thead>
<tr>
<th>Article</th>
<th>Country</th>
<th>Research question/ Focus</th>
<th>Methods</th>
<th>Data Sources</th>
<th>N Teacher educators</th>
<th>N Others</th>
<th>Roles and Behaviour</th>
<th>Development Roles and Behaviour</th>
</tr>
</thead>
</table>

6. Identify Constructs and Hypothesised Causal Linkages

Randolph remarks that the goal of the sixth step “unlike meta-analysis, is to increase the understanding of the phenomena being investigated” (p. 10). We followed a grounded theory approach (Strauss, 1987*; Strauss & Corbin, 1998*) to analyse the data, and used an inductive analysis (Patton, 2002*). We chose this approach, because no ready-made frame of reference was available for answering our research questions.
3. METHOD

Our procedure was as follows. First, using the database, we identified what professional roles of teacher educators were being distinguished within the selected literature (Research Question 1). This was sometimes quite complicated. In some studies, roles were named and described explicitly, but other studies only presented more abstract descriptions. Besides, similar names for a role appeared not always to lead to similar descriptions, and similar descriptions not always led to the same name for a role. After discussing these issues among the three researchers, one of them carried out the overall analysis, which was then checked by the other two. Based on this procedure, we distinguished six roles.

During the process, it became clear that, after analysing about 50 studies, no more roles were to be found, so conceptual saturation (Van Veen, Zwart, Meirink, & Verloop, 2010*) had been reached.

Next, we analysed which critical features, according to the selected literature, characterise a professional role and the accompanying professional behaviour (Research Question 2). The number of studies we found for each of the six roles, and the accompanying behaviour varied in quantity and quality. As a result, some aspects were mentioned only a few times in small, qualitative studies. Therefore, we put together related aspects. In this way, we achieved a strengthened empirical basis. Isolated aspects from small qualitative studies not found in other studies, were thus not included in this review.

Hence, it is important to note that we only formulated a critical feature for a role, and/or the accompanying behaviour, if we found several studies that mentioned (aspects of) such a critical feature. Especially because many of the studies we found were small-scale and qualitative (case studies, interview studies, self-studies), we have carefully guarded the empirical underpinning of the critical features we identified.

For some roles and behaviours, the number of selected studies was small and/or the results were not very consistent. As a result of our careful procedure, for two out of the six roles we only found one critical feature.

We followed the same procedure for the analysis of the critical features of the professional development of each of the roles and the accompanying behaviour (Research Question 3). For three of the six roles and the accompanying behaviour we found hardly any studies that answered research question 3. Hence for these three roles we could not formulate critical features for the professional development.

To enhance internal validity, for each role two researchers independently analysed at least part of the studies on that role and the accompanying professional behaviour. We did the same for the studies on the development of the roles and behaviour. Especially with regard to studies focusing on several roles, this proved to be important in order to arrive at a consistent description across roles, behaviour and development. In the few cases the researchers arrived at different outcomes, the differences were discussed, and the relevant studies were analysed again, until agreement was achieved.
3. METHOD

7. Search for Contrary Findings and Alternative Interpretations

During the year we, the three researchers, worked on this review study, we met every three weeks. In the meetings, we critically discussed the steps described above. We also looked for alternative interpretations, especially during the time step 6 was being carried out. After step 6 had been carried out, we wrote a draft text that included a description of the methods used and a first version of the results we had found. This text was sent to our ‘critical friends’ (see step 8). Their comments led to a sharpening of our interpretations.

8. Use Colleagues or Informants to Corroborate Findings

A draft version of the Methods and Results chapters of this study, together with an overview of the selected articles, was reviewed by seven critical friends, experts in the field of teacher education, from different countries. We asked them to comment on the trustworthiness and transparency of the methods, on the completeness of our literature selection, and on other aspects of their own choosing. They all wrote underpinned, mostly positive, reactions. Below, we summarise their critical remarks and comments. We also describe what we did with their comments.

Goal and concepts

In most comments, questions were asked about the exact aim of the study and about how we had defined its core concepts. Although we had explained in an accompanying letter to them that we would describe this in the first chapters of the study, they clearly missed this information in the draft text. Their questions, however, proved to be helpful in precisely formulating the core concepts and in writing the first two chapters.

Context

Our critical friends emphasised that we should take into account that the contexts of studies differ from country to country and sometimes even within a country. This has consequences for the meaning of the wording used. Sometimes, they also offered suggestions coloured by specific ideas about teacher education or research. These comments enhanced our already present awareness that, where relevant, we should make explicit how visions and meanings were context-related.

Method

With regard to the method, our critical friends pointed to three aspects, mainly related to steps 3 and 4, which required further clarification.

Firstly, they mentioned that the choice of search terms also determined the results that would be found. As explained above (step 3), our choice was partly pragmatic. Search terms related to the term ‘teacher educator’ proved to be the most productive, while, for example, searches with the combination of the terms ‘teacher educator’ and ‘role’ proved not to be efficient.
More specifically, some critical friends pointed to the consequences of the choice of the search term ‘mentor teachers’ to the results. This was a choice we had also struggled with. In our view, because of the increasing importance of school-based teacher education, studies on school-based teacher educators should be included in our review. So, in the orientation phase, we tried out which search term would work best. The term ‘school-based teacher educator’ proved to be too narrow. In contrast, the term ‘mentor teacher’ was rather broad. Moreover, the tasks and responsibilities of a mentor teacher vary per country and context. For example, in some countries the mentor teacher is the person responsible for coaching students inside the university, while in other countries the mentor teacher is the school teacher who coaches the student teacher in the school practice component of the teacher education programme. Hence, using the search term ‘mentor teacher’ would cause some vagueness. Nevertheless, we decided to use it and to read the selected studies carefully to decide whether or not the research described was about school-based teacher educators. We did so by keeping in mind the research questions and central concepts of our study while selecting relevant literature.

The second methodological aspect mentioned by our critical friends also concerned step 3. The choice of only including in our selection articles focussing on teacher educators meant that studies were missing that did not focus on teacher educators but, for example, on professional development schools or on subject matter, curriculum development or assessment in teacher education. They rightly noted that those studies could also offer useful insights into the professional roles, behaviour and development of teacher educators. In the context of this review study, however, we had to make choices and it would be impossible to include all studies on teacher education in our selection. The number of studies would have been too large if we would have taken into account all publications in which teacher educators were discussed. All the same, we recognised that our choices had influenced the results we had found.

The third methodological aspect eliciting questions from our critical friends concerned the way we had taken into account in the process of selecting articles criteria with regard to quality, empirical strength, and validity. The question emerged if it would be possible to code the levels of quality, empirical strength and validity.

As described above, our most important quality criterion was that, in order to be selected, an article had to have been published in an ISI- or ICO-journal. We have already mentioned that this was not a watertight criterion. While reading the complete articles (step 4), we discovered a few articles that in our view could not stand the test of criticism. As a consequence, we did not include these few articles in our selection. In the Appendix to this book, we describe for each of the selected articles the research methods of the study reported on in the article. It was almost impossible to judge the quality of these very diverse and mainly qualitative studies. Because of the large variety in the kind of studies – from quasi-experiments to self-studies – judging the validity in an unambiguous way appeared tricky. Therefore, we decided not to do this.
3. METHOD

In our description of step 6, we explained our choice of strengthening the (internal) validity by only formulating a critical feature for a role and/or the accompanying behaviour, and the development of a role and/or the accompanying behaviour, if we found more studies mentioning (aspects of) such a critical feature. In this way, we carefully guarded the empirical support of the critical features we identified. So, we only drew conclusions on critical features if several studies pointed in the same direction.

Completeness
The additional literature suggestions the critical friends offered can be divided into three categories:
1. Suggestions for studies outside the boundaries set by the above described choices we had made. These studies were not included.
2. Suggestions for some articles that were on our first list of 1260 studies, but were not included in the selection. We reread these articles and added a few to our final selection.
3. Suggestions for books and other additional studies. We carefully checked these suggestions and in this review study used as additional references those that were relevant.

Other remarks
Finally, our critical friends offered some editorial comments. For example: we had made a critical comment about the competencies of teacher educators with regard to self-regulated learning. Two critical friends remarked that this general comment was not in line with their experiences. These kind of comments helped us to keep a close watch on the literature as well as on the conclusions we drew based on this literature. The literature, however, was leading in drawing our conclusions, and not the possibly somewhat context-bounded views of individual critical friends.

3.2. THE FINAL DATABASE

The steps described in the previous section led to a final list of 137 articles, which are included in our database (see the Appendix). The database shows that most of the research on the professional roles, the professional behaviour, and the professional development of teacher educators is concentrated in North-America, a few European countries (UK, The Netherlands), Israel and Australia (see Table 3.3).

From the database, we can also conclude that the research in this area shows a strong growth over the previous decade. Out of the selected 137 studies, 130 (95%) originate in 2002 or later years. The database also shows that a major part of the articles (61%) were published in a relatively small number of journals, of which Teaching and Teacher Education is represented the most (see Table 3.4).
Table 3.3. Overview of the six countries where most of the selected studies were carried out. Not counted are studies carried out in more than one country

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>46</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>23</td>
</tr>
<tr>
<td>UK</td>
<td>14</td>
</tr>
<tr>
<td>Israel</td>
<td>9</td>
</tr>
<tr>
<td>Canada</td>
<td>9</td>
</tr>
<tr>
<td>Australia</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>109 (80%)</td>
</tr>
</tbody>
</table>

Table 3.4. Overview of the five journals in which more than 60% of the selected articles were published

<table>
<thead>
<tr>
<th>Journal</th>
<th>Number of studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching and Teacher Education</td>
<td>39</td>
</tr>
<tr>
<td>European Journal of Teacher Education</td>
<td>12</td>
</tr>
<tr>
<td>Professional Development in Education</td>
<td>11</td>
</tr>
<tr>
<td>Journal of Teacher Education</td>
<td>11</td>
</tr>
<tr>
<td>Studying Teacher Education</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL</td>
<td>84 (61%)</td>
</tr>
</tbody>
</table>

Table 3.5. Overview of the research methods in the selected studies

<table>
<thead>
<tr>
<th>Method</th>
<th>Number of studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case study</td>
<td>36</td>
</tr>
<tr>
<td>Self-study</td>
<td>28</td>
</tr>
<tr>
<td>Essay</td>
<td>17</td>
</tr>
<tr>
<td>Interview study</td>
<td>15</td>
</tr>
<tr>
<td>Survey</td>
<td>7</td>
</tr>
<tr>
<td>Correlation study</td>
<td>3</td>
</tr>
<tr>
<td>Quasi-experiment</td>
<td>3</td>
</tr>
<tr>
<td>Descriptive study</td>
<td>3</td>
</tr>
<tr>
<td>Document analysis</td>
<td>2</td>
</tr>
<tr>
<td>Literature study</td>
<td>2</td>
</tr>
<tr>
<td>Comparative study</td>
<td>2</td>
</tr>
<tr>
<td>Action research</td>
<td>1</td>
</tr>
<tr>
<td>Observation study</td>
<td>1</td>
</tr>
<tr>
<td>Combination of methods</td>
<td>17</td>
</tr>
<tr>
<td>TOTAL</td>
<td>137 (100%)</td>
</tr>
</tbody>
</table>

In the studies included in our database, various research methods were used. In Table 3.5 an overview of these methods is presented. Mainly used were qualitative...
3. METHOD

methods, and many studies were small-scale. The method was often a case study, a
self-study or an interview study (together 58% of the studies). We also found a
relatively high number of essays (12%). The quantitative studies we found were
generally limited in scope. This was why a statistical meta-analysis of the literature
was not possible.

NOTES

1 In Web of Knowledge searching on keywords is not possible.
2 We would like to thank our critical friends Ronnie Davey (New Zealand), Clare Kosnik, Jackie
  Delong, Lynn Thomas (Canada), Melanie Shoffner (United States of America), Perry den Brok and
  Harm Tillema (The Netherlands) for their contributions to this review study.