Complexity in Education
From Horror to Passion

Cok Bakker
Utrecht University, Utrecht, The Netherlands
Utrecht University of Applied Sciences, Utrecht, The Netherlands
and
Nicolina Montesano Montessori (Eds.)
Utrecht University of Applied Sciences, Utrecht, The Netherlands
This volume, the result of four years of work performed by the combined research
groups of Utrecht University (Faculty of Humanities) and the HU Utrecht University of
Applied Sciences (Faculty of Education), focuses on the central theme of 'Normative
Professionalization'.

Drawing on a wide variety of scholars including Hannah Arendt, Gert Biesta, Harry Kunneman,
Donald Schön and Chris Argyris, and engaging with professionalism, ethics, virtue and
morality, this book builds the argument that learning to deal with complexity supports not
only education but the personal development of teachers and the improvement of society
and democracy as well. This volume presents research on a broad range of topics such
as worldview education, co-teaching, moral authorship, traditional-reform perspectives
on education, the discourse on citizenship, teacher education, and the question how
to link religion and education. The research chapters explain the theoretical lenses and
methodological approaches which have been employed to get a grip on complexity.
The results have been interpreted in light of the concepts of *horror complexitatis, amor
complexitatis* and *dolor complexitatis*. Guided by detailed research accounts of worldview
descriptions provided by students and teachers, this framework has been enriched with
the notion of a *passio complexitatis*. In the concluding chapters, the book advocates for an
improved balance between the normative and instrumental professionalization of teachers,
in order to create space for the improvement of pedagogical relations and processes and
to reintroduce the moral dimensions of education. The claim throughout this book is that
allowing for complexity in education – even going so far as to embrace it – is vital for
the improvement of education, and a prerequisite for more authentic relationships (on the
micro level) and the maintenance of a well-functioning democracy and a balanced society
(on the macro level).

This book is of interest to researchers and educators who are interested in normative
professionalization, to qualitative and practice oriented researchers, to teachers and
managers in primary, secondary and professional education, and to the wider public which
is concerned with the significance of education for the development of a stable and
sustainable society.

ISBN 978-94-6300-762-7

SensePublishers
Complexity in Education
Complexity in Education

From Horror to Passion

Edited by

Cok Bakker
Utrecht University, Utrecht, The Netherlands
Utrecht University of Applied Sciences, Utrecht, The Netherlands

and

Nicolina Montesano Montessori
Utrecht University of Applied Sciences, Utrecht, The Netherlands
TABLE OF CONTENTS

Preface vii
List of Figures, Tables and Appendices ix
List of Abbreviations xi

**Part I: By Way of Introduction**

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Professionalization and the Quest How to Deal with Complexity</td>
<td>9</td>
</tr>
<tr>
<td>2.</td>
<td>Developing a Better Understanding of Complexity in Education:</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>An Introduction to the Various Research Projects</td>
<td></td>
</tr>
</tbody>
</table>

**Part II: The Core Chapters of the Book**

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>Teaching for Love of the World: Hannah Arendt on the Complexities of the Educational Praxis</td>
<td>55</td>
</tr>
<tr>
<td>4.</td>
<td>Virtuosic Citizenship</td>
<td>75</td>
</tr>
<tr>
<td>5.</td>
<td>Shaping Phronesis: No Polish without Friction</td>
<td>97</td>
</tr>
<tr>
<td>6.</td>
<td>Passio Complexitatis: A Dialogical Approach to Complexity</td>
<td>121</td>
</tr>
<tr>
<td>8.</td>
<td>How Religious Education Teachers Use Classroom Relationships to Advance the Worldview Identity Development of Their Students</td>
<td>169</td>
</tr>
</tbody>
</table>
## TABLE OF CONTENTS

9. How Primary School Teachers Learn to Act Wisely, Boldly, and Inventively: The Complex Transition from Tradition Oriented to Pupil Oriented Worldview Education 189  
   *Bas van den Berg*

10. Educating Practically Wise Teachers: Personal Formation of Students in an Innovative Teacher Training Program 211  
    *Ton Zondervan*

11. Innovative Education and Complexity 235  
   *Dick de Haan*

### Part III: Final Reflections

12. Why Complexity Matters 261  
    *Nicolina Montesano Montessori*

13. Final Reflections and Conclusions 283  
    *Nicolina Montesano Montessori and Cok Bakker*

Notes on Contributors 295
This volume is the result of four years of work performed by the combined research groups of the Utrecht University (Faculty of Humanities) and the HU University of Applied Sciences Utrecht (Faculty of Education) with the central theme ‘Normative Professionalization’. The combined group has now completed its first period (2012–2016) and is about to start its second stage (2016–2020). This book marks this transition and combines the strengths of both groups, which in practice operate as one unit. Utrecht University provides a rich environment and world of thoughts, ambitious academics-in-action, all in the challenging context of a distinguished research university. The HU University of Applied Sciences Utrecht, which is in fact an Institution for Higher Vocational Education (in our case: Teacher Education), provides a practically oriented and performance focused research context with an impressive and challenging empirical field. In all cases the authors perform (PhD) research within the teaching practices and contexts in which they work as teachers, researchers and educators. We hope that the best of the two worlds is assembled in this book, especially through the combination of theory, methodology and empirical data.

With approximately 15–20 researchers in our group, both PhD’s and PhD students, we explore normative professionalization and attempt to bring it one step further, drawing on the work of Harry Kunneman and his colleagues at the University of Humanistic Studies in Utrecht. This volume is the result of the research performed by a majority of the researchers constituting our group, presenting parts of their research projects. Though they are busy with their own projects as work in progress, they were generally willing, not to say ambitious, to scrutinize their own theoretical and empirical work from the perspective of the focus of this book: to develop a better understanding of complexity in teaching situations in the light of normative professionalization.

From the fall of 2015 until the summer of 2016 we spent most of our plenary discussions and monthly group sessions deliberating on the contents and composition of the book. It has been a hermeneutic process which led to deeper and shared insights in normative professionalization, about methodological and theoretical ways to investigate it, and possible ways to deal with complexity in educational practice.

Teaching is a challenging job. “Never a dull moment.” Nearly always a class and a lesson do not develop exactly in the way they were planned.
PREFACE

There is always, sooner or later, complexity in education. The question is how teachers experience this complexity and how they deal with it. As the subtitle of the book states, attitudes to complexity vary from ‘horror’ to ‘passion’ in their extremes.

We believe that we can never eliminate complexity in education, not even by the most sophisticated educational strategies. Education is about people and therefore education is complex, just as complex as human life itself. The question is how to deal with this complexity in education, and how to benefit from it, even. Drawing on Hannah Arendt, Gert Biesta, Harry Kunneman, Donald Schön and Chris Argyris among many others and by engaging with professionalism, ethics, virtue and morality, we build the argument that dealing with complexity supports not only education but the personal development of teachers and the improvement of our society and democracy as well.

It has been an inspiring time to all of us and we do hope that it will be inspiring for our readers now.

Cok Bakker

Universiteit Utrecht/Utrecht University

Hogeschool Utrecht/HU University of Applied Sciences Utrecht
LIST OF FIGURES, TABLES AND APPENDICES

FIGURES

Figure 1.1. Instrumental professionality: The teacher as an instrument of the system, implementing the system into practice 13
Figure 1.2. Reaction 1: The experience of complexity leads to a new attempt to apply the system, by trying harder 25
Figure 1.3. Reaction 2: The experience of complexity leads to an improvement and/or extension of the system and an attempt to implement the system yet again 25
Figure 1.4. Reaction 3: ‘Amor Complexitatis’: Embracing complexity as constitutive part of education 26
Figure 5.1. The hybrid moral atmosphere (Gertsen, Schaap, & Bakker, 2016) 107
Figure 5.2. Concept of moral authorship (Gertsen, Schaap, & Bakker, 2016) 109
Figure 6.1. The minor philosophy, worldview, spirituality as a holistic approach to human beings 132
Figure 6.2. Example of a mood board 135
Figure 10.1. Windesheim teachers college model of competencies 219
Figure 10.2. Korthagen’s onion-model of elements of educational professionalism (Hoekstra & Korthagen, 2011, p. 79) 225

TABLE

Table 6.1. Summary of worldview topics 129

APPENDICES

Appendix 8.1. Teacher/School Characteristics 185
Appendix 8.2. Interview Questions 187
# LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATEE</td>
<td>Association for Teacher Education in Europe</td>
</tr>
<tr>
<td>ECTS</td>
<td>Europea Credit Transfer system</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>HAVO</td>
<td>Hoger Algemeen Voortgezet Onderwijs (Higher General Continued Education)</td>
</tr>
<tr>
<td>HU</td>
<td>Hogeschool Utrecht (HU University of Applied Sciences Utrecht)</td>
</tr>
<tr>
<td>ICLON</td>
<td>Interfacultair centrum voor lerarenopleiding onderwijsontwikkeling en nascholing van de Universiteit Leiden/ Leiden University Graduate School of Teaching</td>
</tr>
<tr>
<td>IP</td>
<td>Instrumental Professionalization</td>
</tr>
<tr>
<td>KBE</td>
<td>Knowledge-based Economy</td>
</tr>
<tr>
<td>NP</td>
<td>Normative Professionalization</td>
</tr>
<tr>
<td>NPDL</td>
<td>New Pedagogies of Deep Learning</td>
</tr>
<tr>
<td>PPO</td>
<td>Passend Primair Onderwijs (Appropriate Primary Inclusive Education)</td>
</tr>
<tr>
<td>PSI</td>
<td>Professional Skills and Identity</td>
</tr>
<tr>
<td>RE</td>
<td>Religious Education</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific, and Cultural Organization</td>
</tr>
<tr>
<td>UU</td>
<td>Utrecht University</td>
</tr>
<tr>
<td>VU University</td>
<td>Free University Amsterdam</td>
</tr>
<tr>
<td>VMBO</td>
<td>Voorbereidend Middelbaar Beroepsonderwijs (Preparatory Middle-level Vocational Education)</td>
</tr>
<tr>
<td>VMBOt</td>
<td>Voorbereidend Middelbaar Beroepsonderwijs Theoretische Leerweg (Preparatory Middle-level Vocational Education Theoretical Learning Path)</td>
</tr>
<tr>
<td>VWO</td>
<td>Voorbereidend Wetenschappelijk Onderwijs (Preparatory Scholarly Education)</td>
</tr>
<tr>
<td>WinTC</td>
<td>Windesheim Teachers College</td>
</tr>
</tbody>
</table>
PART I

BY WAY OF INTRODUCTION

This part includes an introduction to the purposes of the book and it briefly sketches the material we draw upon.

Chapter 1 by Cok Bakker constitutes the framework for the book on a meta level. He describes his perspective on normative professionalization, the developments in the field and the contributions that the Utrecht research group on Normative Professionalization delivers.

Chapter 2 is composed by both of the editors and provides a detailed introduction to the book, the structure of the chapters, work procedures and a more detailed theoretical and methodological frame. It also briefly introduces the chapters of Part II, the core of the book, with the chapters by all the authors, and Part III, which contains the concluding chapters by the editors.
INTRODUCTION

The quality of education is under a magnifying glass. Governments, inspectorates and school boards are working together to achieve good or even excellent education. In this respect the professional development of teachers is regarded as an important – perhaps even the most important – instrument.

The question is, however: what is the end goal of this professional development? Just what constitutes the teaching excellence that we are striving for? When do we call education ‘good’? And on the basis of what criteria do we make this evaluation? Which stakeholders in education decide on the relevant and preferred criteria? Ultimately, should the teacher be seen as an instrument who implements accepted visions on education or should he be a well trained professional who can make relevant and justified judgments and decisions when performing his task? Should the teacher play an instrumental role or rather that of a craftsman?

Teachers sometimes feel themselves to be in a quandary. They feel the pressure of all that is expected of them, the many externally imposed standards they must meet. At the same time, they have difficulties relating these instrumental norms to the complexity that they face daily in their classroom with their students.

In the research group ‘Normative Professionalization’ – the combined research group of Utrecht University and the HU University of Applied Sciences Utrecht – we take the view that good education occurs when a teacher not only masters the required knowledge and skills but also develops and represents strong personal skills as a teacher. The leading assumption is that required knowledge, skills and protocols only become meaningful, when they go together with personal excellence in the professional performance of the teacher. This implies the capacity of being a role model for a heterogeneous group of students or pupils and the capability of making individualized judgements and decisions in their daily practices that are often moral in nature. After all, these considerations are not neutral as such
and have a subjective, normative dimension. They are coloured by the views of teachers about what is the right thing to do in their daily actions in the classroom. Professional behavior, therefore, is never just a matter of applying and implementing prescriptive and standardizing protocols. In this book we depart from the idea that a professional teacher needs to be aware of this and will need to develop the personal, morally loaded dimension of the teaching profession. He needs to find the right balance between an instrumental and normative fulfilment of the profession. He needs to be able to decide when and how to intervene or ‘to let go’, to be able to reflect on his personal role and behavior and to create an ongoing dialogue with pupils, colleagues, parents and other stakeholders. In other words, the balance between instrumental and normative professionalization requires a certain measure of intersubjectivity. It is an interpretive process which takes place within the context of the rules, regulations and principles of the school and those of society at large.

We realize that very often teachers find themselves in situations that are not satisfactorily covered by procedures and protocols. Very often the daily teaching practice is much more complicated than could ever be foreseen. Let us give a few examples. What would or should a teacher do when:

• Secondary school students start a very interesting discussion on an urgent societal issue when the scheduled math lesson is about to start?
• Some of the primary school pupils start yelling and screaming, apparently in great joy or in fear and despair, when some suicide bombers have attacked a building?
• He finds himself in the midst of a fight between boys and/or girls during a break at the school yard?
• He just had a heavy personal experience such as the loss of a loved one and he struggles to play his role as a professional?

Just as life is difficult, complex, and full of unexpected events, it is the same for education. After all, it is an activity between people, between generations, between teachers and students and amongst teachers and students. But it is also an activity that takes place within the realm of the rules and expectations of the school, the Ministry of Education and society at large. The interesting issue is how teachers act and reflect in these complicated situations, and what is their mark of reference when it comes to moments when they feel they should act in a certain way and how this may be in conflict with their own personal preferences. These are the kind of questions that will be dealt with in this book.
This book is based on earlier, groundbreaking work about Normative Professionalization (NP) that Kunneman and his colleagues at the University of Humanistic Studies in Utrecht have developed since 1990 (Kunneman, 1996; Van Ewijk & Kunneman, 2013). It also draws on an earlier manifest produced by our research group (Bakker & Wassink, 2015) and the inaugural speech of Bakker in 2013 (Bakker, 2013). We will describe briefly how this volume relates to these three inheritances. Kunneman describes three stages in the development of NP, namely a first stage (1990–2000) during which NP was developed in opposition to growing and dominant new views about a technical, instrumental take on professions in general and education in particular. In other words, during that period NP contested this new trend. During the second period, this opposition was mitigated and the scientific and civic discussion achieved new nuances and new insights which acknowledged the complexity and interrelations between instrumental professionalization (IP) and NP. The last stage (2010–2016) further investigates and develops the achievements of the previous stages in more detail, adding the concepts of ‘horizontal morality’ and a normative form of scientific research known under the banner of modus 3 research, a form of research that takes moral considerations on board. We situate our work in this third stage, describing and analyzing various case studies and adding new theories and methodologies to the spectrum. Throughout the book we consider issues concerning the balance between IP and NP.

The manifest (Bakker & Wassink, 2015) described six related movements that can be distinguished in current developments regarding education and educational professionalization as will be described in detail in the next chapter.

This book focuses on the first movement, namely, moving from a dolor to an amor complexitatis. Education is inherently a complex activity, which entails dealing with unexpected, unpredictable situations. One tendency could be to avoid dealing with the complexity, by denying it or by further increasing the systemic approach, for instance by prohibiting or punishing unexpected behavior by a student. What we explore in this book is what happens in situations where an amor complexitatis is shown: the willingness of a professional to embrace the complexity or to at least to engage with it. In order to do this, we draw on Biesta (2012, 2013) who claims that good education requires the acknowledged freedom for both teachers and their pupils to express themselves and to respond to each other in full freedom.
This implies a certain unpredictability in education and teachers should be prepared to engage with this uncertainty throughout their formal education. They should learn and be prepared to reflect on these moments and the subsequent interventions and interactions. They should also be able to discuss these moments with colleagues, other professionals or the students themselves. This by itself requires a complex take on education, in our view best described by Argyris and Schön (1978) in their accounts on single- and double-loop learning and the additions by Swieringa and Wierdsma (1990) on triple-loop learning, in which they include the dimension of someone’s fundamentals, morality and views on life. We will describe the theoretical and methodological framework of this book more in detail in Chapter 2. The book engages with this complexity at different levels: the theoretical and methodological approaches that were selected by the researchers to get grip on the identification and investigation of complex situations as well as on the actual practice in the classroom. In what ways did professionals deal with complexity? What instruments did they develop to engage with complexity? What did this deliver for the teacher and for the students? What can we learn from it in terms of teaching methodologies? What do we learn about the complex relation between IP and NP? What do we learn about methods of reflection, dialogue, intersubjectivity?

The third direct source was the inaugural lecture held at Utrecht University, launching and presenting the research program for Normative Professionalization (Bakker, 2013). In this lecture it was made clear how the new theme of NP is a transformational continuation of a long period of research into the relationship of religious and worldview traditions with school policy and education (1994–2012). The revenues of this period of research are important building blocks for the newly developed ideas for research into NP. We think that an approach along the lines of NP could be very helpful and easier to accept for a professional to discuss the foundations of education. This ongoing development is also mirrored in the increase of research capacity for our group.

In the whole spectrum of questions which present themselves with regard to the theme of NP in this volume, we focus on complexity in education. The following central questions are leading in the overall project:

• How do teachers as normative professionals perceive the complexity of teaching in an educational setting?
• How could we, as educators and researchers, develop understanding of and grip on the complexity of teaching, theoretically and methodologically, including the way teachers deal with this?
What is the necessary consequence of these insights for the professional training of teachers and what possible recommendations can we formulate for schools, teachers, managers and perhaps for the government, based on our findings?

With these questions we elaborate on an hermeneutical perspective about professional teaching and about the role which interpretation plays for professional teachers. The focus of this book about complexity is a concrete ‘sub-subject’ of interest within the broader spectrum of questions constituting our research into ‘normative professionalization’ (ref. Kunneman, 1996; Van Ewijk & Kunneman, 2013; Bakker, 2013; Bakker & Wassink, 2015). Developing this dimension of professionalism has to do with increasing the knowledge that teachers have about their own professional and personal identity; helping them to create awareness of their deeper beliefs about the role of education in society; and helping them to develop their skills in encouraging and guiding the broader, personal and moral development of students. It is about interpreting knowledge bases, protocols, contexts, and about becoming aware of the moral dimensions of education. Normative professionalization, therefore, operates at a more basic level: what is at stake is just the person you are. The teacher, probably primarily as a human being, is an example and role model to another human being, in this case the student.

If teachers achieve more insight concerning these type of effects and impact, they will be able to plan and evaluate their ways of acting professionally more carefully, in order to better connect external requirements with daily reality, and they will be more capable of indicating the boundaries of what can and cannot be expected of them. The aim is, furthermore, that they will increase their capacities to be a role model for their pupils, to be a reliable colleague, and to obtain a broad repertoire of action and reflection, so that they can make informed choices and decisions when unpredicted situations occur. In other words, one of the aims of this book is to supply material for teachers and teacher trainers, as well as for the institutes they work in, in order to develop the necessary dispositions, knowledge and practical wisdom to engage with what Biesta (2013) has named ‘the beautiful risk of education’.

This will enable both teachers and related institutions to play a significant role in the discussion about what ‘good’ education may be considered to be within a heterogeneous, plural society, and will allow these teachers and related institutions to create sound and balanced education with their students, colleagues, parents and other stakeholders.
When addressing teachers with ‘he’ or ‘him’ we refer to both male and female teachers. We do not wish to opt to disrupt the text with the ‘he/she’ formula.

REFERENCES


Cok Bakker
*Universiteit Utrecht/Utrecht University*
*Hogeschool Utrecht/HU University of Applied Sciences Utrecht*

Nicolina Montesano Montessori
*Hogeschool Utrecht/HU University of Applied Sciences Utrecht*
COK BAKKER

1. PROFESSIONALIZATION AND THE QUEST HOW TO DEAL WITH COMPLEXITY

INTRODUCTION

In this book we explore how teachers deal with complex situations in their teaching practices. We do this from a researcher’s perspective. Our main interest is what theories we know and what methodologies we can use, to try to get a better understanding of the thinking, decision-making and actions of professional teachers. Theory and methodology is of great importance then, because a theory could provide us with ideas, concepts and necessary connections to look at key elements of our research interest, like the notion of a teacher’s professionality, ‘complexity-in-education’ and the way in which teachers perceive the teaching environment. A good theory, so to say, provides us with a pair of spectacles to observe and analyze our object of research. A relevant methodology could help with this exploration by providing us with ways to get a grip on our research object. Due to reasons related to the object itself (‘complexity’) it is a difficult job to research this teaching-learning practice exactly because it is experienced as something complex, which means: hard to get a grip on. Let alone its relationship to professional thinking and acting. A good methodology is then necessary.

In this chapter we provide a framework for the chapters to come. The authors of the following chapters each contribute to the central theme of the book drawing from their own research projects. On the one hand we could say that each author does an individual job by exploring a much more detailed and concrete aspect of ‘complexity in education’, like it figures in their own research projects. And so we encounter various forms of complexity in citizenship education; the struggle to deal with different religious and secular worldviews in education; the issue how to act in the right way while knowing that there is not a single right answer to the question about good education; the problem of the existence of different visions and ambitions in co-teaching teams, amongst others. On the other hand, all authors belong to the same research group under the umbrella of the same central theme: Normative professionalization. It is from this central base of joint research that we have
to clarify at the beginning what we mean with this notion of Normative Professionalization and from which we have to explain and define the key elements of this concept (see Bakker, 2014; Bakker & Wassink, 2015).

In this chapter we focus on the following key concepts which make up the shared theoretical basis for all the research projects presented in the remainder of the book: what do we mean by professionality and why is this a useful concept in understanding the perceptions of teachers? (par. 2) How to distinguish between rational-instrumental professionality and normative professionality and what do we gain by this? (par. 3). Then we highlight how Normative Professionalization is related to the quest for ‘good education’ (par. 4). The notion of complexity in teaching situations is presented in the light of the theory of ‘Normative Professionalism’ that was developed earlier (par. 5). In a next step, we anticipate on a general level the various reactions that are possible when a teacher is confronted with a complicated teaching situation (par. 6). Finally, we suggest the option that complexity is unavoidable and sometimes (or probably very often) cannot be managed in such a way that it could ever be resolved. In other words: the option we have to accept is that unsolvable, complex situations will inevitably occur in the professional context of the teacher, and that therefore an attitude to cope with this would and should be part and parcel of a teacher’s professional attitude (par. 7).

By means of this chapter we have developed a framework and a point of reference for the chapters to come, together with the common thread that links all the research projects in our group and therefore all the chapters in this book.

PROFESSIONALITY

Among the many available definitions of professionality, we find an appropriate description in Weggeman (2007) who identifies four characteristics of professionality. The focus of his work is mainly on organizations that place emphasis on knowledge, knowledge production and where ‘knowledge workers’ create their professional practices. Self-evidently, this makes his description relevant for schools and teachers as well.

First (1), is indicated that, before ever getting to work, a professional needs to be trained and educated in a specific professional field in advance, in order to do the work. Specific knowledge, skills, attitudes and competencies need to be gained and trained, and finally mastered on a certain level in order to be sufficiently equipped for the work. Secondly (2), through the work performance of a professional, new knowledge is generated. In applying
the knowledge and skills you have, you might discover quite easily that the relevance, appropriateness and effects are just a bit different than you would have expected. Or having prepared a lesson, you might easily discover (learn…!) in the actual teaching that students are not so well prepared or motivated as you had expected, or the other way around that some students are already experts on the topics you wanted to teach. In professional performance new knowledge and strategies come up or are necessarily developed. So, professional acting leads to new and newer knowledge and skills; the initial education of the professional teacher is not sufficient and the body of professional knowledge and skills is not finalized, but both are ongoing and dynamic. Tailor-made creativity generates new knowledge on the spot. Thirdly (3), as a consequence of this former characteristic, a professional needs to have the professional freedom and autonomy to act. If it is inevitably not clear in advance how a lesson will progress and unexpected elements of knowledge and events occur all the time, like we said, then a professional teacher should have the freedom and autonomy to react on this type of situations adequately. On the spot decisions have to be made to act professionally in different ways, sometimes without a lot of time to reflect. Fourth (4), there is the need, sometimes even proclaimed by law, to strictly delimit the profession and the group of professionals. Medical doctors are allowed to do surgery, and for our own sake we have defined clearly who belongs to this group and who does not, so that surgery is expected to have a guaranteed quality. Concerning teachers, you are not allowed to teach if you do not have the appropriate degrees. The in-group and out-group is clear: you have this degree or you don’t. Sometimes however this mechanism is not that clear: the criteria are constantly under discussion and who belongs to the in-group is not exactly clear. This situation is more confusing but at the same time more interesting. Let’s look at journalists. Is everybody who has written an article in a newspaper a journalist? I would say no, and we can easily imagine that the ‘real journalists’ struggle to get clear what criteria should be raised to call someone a journalist and whether or not to include someone in the professional group. This mechanism is interesting from the perspective of normative professionalism: there is a mainspring and a continuous, urgent need for a debate on ‘good quality’ and the relevant criteria.

In this respect, the four characteristics of professionalism are a helpful prelude for conceptualizing Normative Professionalization in our joint research. Especially helpful is the distinctive openness for subjectivity in the interpretive acts of the professional that emanates from these four characteristics, extending up to the implied decision making in the free space
and autonomy of the professional. The discussion on boundaries and quality criteria as implied with the fourth characteristic, is fundamentally normative as well.

Besides the notion of ‘professionality’, we use the notion of ‘professionalization’. We use this concept to indicate and highlight the process a person undergoes with the aim to become a professional or in order to grow as a professional.

**INSTRUMENTAL AND NORMATIVE PROFESSIONALITY**

We could elaborate on this by asking ourselves some crucial questions. If it is true that a teacher comes to a unique performance almost by improvising, relating himself to the specific flow of the lesson, what exactly guarantees the good quality of the lesson then? Of course, we expect a teacher to be eager to perform well, given his professional freedom and autonomous actions. But the question could be asked over and over again: how would and how could a teacher claim that in his relative autonomy he is doing the right things? Why was his improvising action a ‘good’ action, and who is allowed or expected to answer this question? Is it the teacher himself? This is, of course, inevitably the case because he is the one who is performing the action at that very moment and we expect him to aspire the best. But many other authorities could be mentioned on the second row: the school director, peers, students, parents, the school inspectorate, and others. In this book we focus on the teacher, so why would and how could a teacher claim that in his relative autonomy he is doing the right things? And with every intervention, every single remark, even with every interpretation he makes of what is going on in the classroom, the question could be asked: how would a teacher legitimize that these are the right interventions, remarks and interpretations to make? Once more we realize that whatever a teacher decides to do, could very often also be done in a different way.

A big effort is made in society and educational policy to standardize the good quality of education. It might be that professional teachers have their free space and autonomy, but even then we could first try to understand on a societal level what it is that we see as good education before we secondly prescribe it. And so we did, extensively. Based on educational research (or not), on political decision making, school policy, trends in the newspapers and many other discourses we have developed an extensive ‘system of education’. This ‘system’ consists of knowledge bases of all the different subjects (what do you need to know to teach a subject and what should be taught), lists with competencies which define a good teacher, codes of
conduct, educational objectives and many other protocols and procedures. Very often, in line with this, assessment strategies and tools are developed to establish whether or not actual progress has taken place. And of course there are good reasons to strive for a standardized procedure with regard to testing and assessing.

To have a basis, a professional teacher needs to be acquainted with this ‘system’ and needs to master the knowledge and skills of the professional as presupposed by the system. I label this as \textit{instrumental professionality}.

We could imagine this by the following scheme.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{instrumental_professionality.png}
\caption{Instrumental professionality: The teacher as an instrument of the system, implementing the system into practice}
\end{figure}

The leading assumption of this instrumental side of professionalism is that if the teacher performs in accordance with the system – or rather, in line with what the system prescribes – then we will have good education. The teacher is then considered as the instrument with and through which the system is implemented. The better the teacher – as an ‘instrumental professional’ – realizes what the system prescribes, the better our educational practice will be.

It’s easy to see that it is too simple to put it in this way. Which is not to say that this instrumental component of professionality is useless. The instrumental aspect of professionality provides an extensive and rich source of information and offers guidelines how to perform well as a teacher. But beyond this, it is clear that we run the risk that the fundamental factor of the
subjective element of the professional performance is neglected. Thinking about good education and performing well is not equivalent to simply applying a system. A teacher could never be the standardized instrument that applies a system unambiguously. As Biesta (2010, p. 128) puts it:

Given that the question of good education is a normative question that requires value judgments, it can never be answered by the outcomes of measurement, by research evidence or through managerial forms of accountability – even though … such developments have contributed and are contributing to the displacement of the question of good education and try to present themselves as being able to set the direction for education.

And here subjectivity and normativity comes in, which we label separately from instrumental professionality.

The normative professionalizing of teachers deals with that aspect of a teacher’s development where the interaction occurs between the person of the teacher, the profession (as a totality of knowledge, skills, codes, culture, and so on) and the social and societal context. Development on this level signifies something different from the expansion of observable knowledge or skills, which is the area of instrumental professionalizing. The system as a quasi-objectively determined and standardized format of ‘good education’ seems to be ‘only’ a very useful system, be it in a highly complex reality with many other actors and events that are also normatively influencing the final outcome of how to teach. Normative professionalizing revolves around the expansion of the teacher’s consciousness, of a sensitivity that teachers put into practice during the daily execution of their task.

The interesting idea is that the system is just one of the many influences that finally make the teacher act. Through a complex and layered process of consideration, interpretation and decision making the final professional action is subjective and contextually embossed. We could sum up how a normative professional is the decisive factor that makes the final impact by which the one-to-one impact of the system on the practice is made relative:

- A teacher as a normative professional is aware of the fragmented and casual knowing of the system. In other words: every teacher will have his own image and (re-)construction of the system, i.e. what is expected and what should be done.
- The teacher interprets each of the elements of the system – as far as he is acquainted with these elements – subjectively; in other words: no two teachers will interpret the elements exactly in the same way.
• The teacher is aware of his own subjective interpretation of the social environment of the school and the classroom context, and, given this interpretation, he decides subjectively if and how a procedure or prescription is possibly relevant and should be applied.

• As a consequence of the former points, the teacher realizes that the match between an element of the system and a specific classroom situation can never be made in a standardized way. Eventually the match is made, but its character will always be that of a contextually constructed act of the teacher.

• It is not only the system. The teacher realizes that many other factors influence the perception and the evaluation of a situation, which are undertaken in order to determine how to act. A good part of those factors might even stay implicit, silent and unconscious.

• The teacher acknowledges the volatility and whimsicality of the teaching-learning process and its meaning for professional acting. Every intervention of a teacher creates a non-predictable sequel to a situation, which asks for new professional acting.

• But already in close proximity to the system, the subjectivity of the professional is expected to be aware of the presuppositions and assumptions underlying the system, to have a value judgment of respective elements of the system, etc.

It is clear that instrumental and normative professionalization are linked. They cannot be seen in isolation. Distancing oneself from instrumental professionality would constitute a denial of the relatively fixed basis of knowledge and skills on which the profession is based. Likewise, ignoring normative professionality would be a denial of the fact that all canons of knowledge, protocols and methods still do not result in a completely standardized, uniform educational practice. It is precisely within this interplay that we discover the teacher as the key player, rather than as the instrument that is put to use, in the final performance of ‘good education’. It is the teacher, after all, who uses the instruments and mechanisms of the system in specific, often unique situations with individual students, continually interpreting, and making unique, value-charged considerations about what is the right thing to do (Bakker, 2013; Hargreaves & Fullan, 2012). Here too Hamachek’s adagio is valid: “(Probably) consciously, we teach what we know. Unconsciously, we teach who we are” (in: Korthagen, 2001, p. 1).

Let’s make this more concrete. In the national knowledge base (the ‘canon’) on the school subject history, some lessons on the causes of the Second World War are prescribed, let us say for secondary education and for 15 year
olds. On the one hand it is clear that we are dealing here with the suggestion to implement a standardized history education. We have organized that all students of that age must acquire and will have obtained a specific amount of knowledge on this general topic, pertaining to the subject of history. It is, on the other hand, known by teacher educators and school directors – just as it is known by teachers themselves by their own daily experiences in school – that history teachers could easily develop and perform totally different lessons on the basis of this simple prescription. Teaching methods, interaction patterns and even the selection of learning contents, together with the measuring of learning performances, will in all probability vary a lot. Which is not to say that it is self-evident that different practices flow from the same prescription.

A second example shows that very ‘unprofessional’ characteristics of a teacher may heavily influence his professional performance. We may say that it is ‘un-professional’ when a teacher who is in a bad mood or who is having quarrels at home, allows these personal, incidental elements to have an impact on his teaching performance. Of course, it is recommended to suppress emotional eruptions in the classroom which are too heavy, but it’s easy to see that the mood of a teacher has a certain influence on the professional performance nevertheless. And so this constitutes an influence on the teaching that children observe and undergo. Far removed from implementing the system of good education indeed, but a professional performance that is realized anyway and, as such, an educational reality for the student.

Every element in a system of education that one is aware of, to start with those we listed in Figure 1.1, could be seen in this light, which means that all these elements will have different practices as a consequence or that they will not be practiced at all. An interesting thought experiment could be done on this, built on the realization that the key filter or interpreter is the teacher as a normative professional.

THE QUEST FOR GOOD EDUCATION

This brings us to the fundamental question about the quality of education. The teacher as a normative professional is aware that with the system alone good education is not guaranteed and that his reflection on his professional performance will have to be more dimensional than only instrumental. Perhaps the normative professional is not satisfied with the qualifications according to the system, and subsequently only parts of these are brought into practice. The crucially individual, subjective interpretation of the system, and, in addition, the interpretation of the entire classroom context, with the
impact of individual qualities and deficiencies, preferences and aversions, relationships in the group, and so on, are all of influence on the development of professional acting.

When is professional teaching good teaching then? It depends on many factors and is highly contextually related (Bakker & Wassink, 2015, p. 17).

Our view on good education depends for example on our perspective on human development. If children stay at our school for eight years, then what and how do we want them to develop? These types of pedagogical questions which every teacher should ask, are not only related to the system of education (if there is any consistent and explicit fundamental philosophy behind all of that), but very often they are related to a teacher’s personal worldview. On the one hand, we could assume that teachers act out of a certain life stance. A specific worldview might lead to certain conceptions of the good life and a conception of how and for the purpose of what ends people should develop. On the other hand, a life stance could be more implicit and less reflective: then, teachers show in their actions what is important to them (which could not always be that well thought through and consistent with an explicit and consciously cherished worldview). We could also presume that a life stance continuously forms itself through the actions of a teacher, as it were. Here, ‘life stance’ is understood in the broad sense of the word, as a certain fundamental conviction on the basis of which one directs and judges one’s attitude in life (based on Brümmer, 1975; see Bakker, 2013). It can range from a non-articulated life stance – the sum of a person’s values and ideals that remain implicit for that person, at least until that person feels that those values are under threat (Borgman, 2012, p. 350) – to an explicit and extensively elaborated religious or secular worldview, rooted in a long tradition.

To give another example: when talking about ‘good education’, it is good to realize what perspective on knowledge development we take. A normative professional who claims ‘to teach facts’ should be aware of his epistemology and could come to realize that even then his notion of a ‘fact’ is one (out of many) perspectives on knowledge. And that normativity already comes in here. At the very least we could expect some relativism in the thinking of another teacher, in the sense that he would acknowledge that an event in reality is never objectively knowable as an isolated phenomenon, but must always be considered in its context. So, a brute fact does not exist. What happens is always both cause and result of other events. Knowledge, then, cannot be considered as a mere objective phenomenon located outside of the person, but is always connected with the context in which it is used and developed, which includes the moral and existential questions that the
person is grappling with (Kunneman, 2005; Dewey, 1938; Argyris & Schön, 1974; Weick, 1995). Both positions could be found among teachers. And a normative professional teacher should be aware of his position.

The question about good education, then, does not have a simple, unambiguous answer. The answer is related to opinions and beliefs about the ‘good life’ and how this interferes with ‘good education’. And it is related to the many contextual factors in the actual teaching situation. The teacher is a key player in the creation of good education. It is his professional performance to do so, and also to reflect on the normative dimension of all his professional acting.

We believe strongly in this individual reflection and the power and influence of the ‘professional capital’ of individuals (Hargreaves & Fullan, 2012). As we noticed already, many other factors and actors are also influential, but it is interesting to realize that many of these factors do have their influence through the filter of the teacher’s interpretation. This notion goes to show that the previously mentioned vision on the teacher as an instrument is insufficient to reach good education. The complexity involved in making correct choices and decisions is not included in this instrumentalist perspective on education.

Not wanting to be blamed for proclaiming an excessively individual approach to the professionalism of teachers, we see on a next level the relevant function of *inter-collegial* normative professionalism. On the individual level it could sometimes be a hard job to get a clear picture of what is the right thing to do. This could be a struggle and sometimes a teacher even has to act without being sure that what he did, was the right thing to do. An obvious thing to do next, in this kind of situation, could be to consult a colleague, as a peer, and to discuss the matter with him. Then we could say that, in that very situation, two teachers develop a conception of good education inter-subjectively. They are inter-subjective normative professionals.

This is how I see schools or – if the size of the school is too large – the entity of teaching teams. These are so called moral communities. Teachers talk about life, school life and students all the time, and during these talks they elaborate on their views about good education.

Having said all this, we define normative professionalization as follows:

Normative professionalizing is the dialogical development of the dimension of profession, within which the teacher is conscious of the fundamental and existential aspects of his work. This means that he recognizes the uniqueness of the appeal made on him by the other
(the pupil). He tries, while recognizing the uniqueness of his own self and that of the other for whom he is responsible, to achieve a good act.

TOWARDS A BROADER UNDERSTANDING OF THE QUALITY OF EDUCATION

It is undeniable that things are on the move in education. It seems that more than ever the political world, society as a whole, and the media are paying attention to the quality of education. It even seems that a certain consensus has been reached that merely monitoring more closely on the basis of a narrow definition of quality does not offer a way out and may even have the opposite effect (Onderwijsraad, 2013, 2016). Teachers, parents, researchers, policy makers and politicians are looking on all fronts to explain the broader meaning of good education. A school is more than just an institute where children learn to write and read. And a school consists of more than just technically assessing if actual progress has been made. But why do we want to change towards a broader understanding of the quality of education? A normative opinion seems to be behind this. And if we want more than only the ‘core subjects’ (in the sense of a ‘broader’ view on quality and what really counts), what is the better thing to do then and what is it that we desire to do additionally?

In line with this problematizing of the notion of ‘good education’, not all agree on the proposed changes. There is ‘still’ (!) a vast group of educationalists who emphasize the importance of a rigid and solid system of education, in the sense that they stress the potential and relevance of providing objectified standards of quality, including adequate and independent strategies for measurement. And on the other hand, there are educationalists advocating to revalue the human, the subjective and normative aspects of teaching in a naïve way, as if a comprehensive bureaucracy can only hinder a good performance.

As said earlier, it is a false dilemma to choose either for rational-instrumental professionalism or normative professionalism. We cherish an inter-subjective consensus on different levels (a team, a school, a foundation, nationally), which could be ‘translated’ into a system and made effective in this way, but at the same time we expect every professional to be critical and to reflect on the normative assumptions that are behind all system characteristics. Additionally, we expect every professional to reflect on as many other important factors as possible, that are seen to influence their teaching and thus their decision making around ‘good education’.
Reflection on ‘Complexity’ as a New, Obvious Step in Our Work

Based on a synthesis of all our research projects thus far (2012–2016), including a meta-analysis, we perceive six developments or movements that are taking place right now, or which we think ought to take place. We list all six of them, because this may shed a better light on how we position ourselves in our search for a better understanding of complexity in education. The theme ‘complexity’ and how teachers could and should accept and embrace complexity in their teaching practices, is the first of the six movements we distinguished. The obvious next step to take in order to achieve progress in our group was to elaborate further on this theme, and in this way the entire book project started (Bakker & Wassink, 2015, pp. 35–38).

The six movements we identified are the following:

**Movement 1. From technical-instrumental thinking on the quality of education to a ‘dolor complexitatis’, and from the ‘dolor complexitatis’ to an ‘amor complexitatis’.** (Latin: ‘dolor complexitatis’ = the pain of suffering from the complexity; ‘amor complexitatis’ = a love for or the embracing of complexity). In the next paragraph we pay more attention to this movement and we elaborate on this theme, because the identifying of this movement was the motivating cause for the book project on ‘Complexity in Education’, and its exploration constitutes a framework for the next chapters.

**Movement 2. From providing an account to accountability.** Teachers have gotten used to providing accounts of the results of education. Test results, graduation rates and international comparisons are almost daily fare in public debate. Much attention is directed towards the instrumentalizing and measuring of what we teach. The prior question about what constitutes good education, which precedes concrete teaching methods, assessment strategies and so on, often remains unasked (Biesta, 2010). Too little attention is paid to the ‘what for?’ of the school and education: what is the ultimate purpose of education? This question concerns the responsibility we have while teaching, and the way we take stock of the proceeds and results, and how we communicate all of this. Bare data, facts and figures might not reflect the multi-layered purpose of the work of teachers, educators and researchers and the ‘real’ learning results of the students.

A broader understanding of the quality of teaching appeals to other, alternative methods of accountability, richer than accounting by data, facts and figures. Possibly a more narrative accountability would match better,
by giving examples of situations (‘good practices’) and by sharing stories about good quality education. Hidden in these stories, but revealed in the exchange, they can offer us (moral) frameworks within which we can give more depth and meaning to the bare accounting practices.

Movement 3. From a narrow vision to a broad, layered (multidimensional) vision of quality. When the good teacher is defined by means of a list of ten competences, we can easily conclude that every teacher who has received a check on the ten competences is a good teacher. Nothing is less true, however. Two teachers, each with ten checks, are obviously two different teachers with different qualities and opinions. Unfortunately, however, this is not taken up as a reality in policy, research and practice. There is already much attention given to reflection in the practice of education. Our observation is that many of these reflection models are implemented too hastily in order to get results, even when they are intended to explore the deeper self, and, as such, they are used in an instrumental manner. Reflection by the professional ought to be aimed at critically appraising the qualities of the instruments and at conducting a value assessment of these. In this way, insight can be gained into the multidimensional character of quality. Formulated differently: why do we think that between two teachers, both of whom have crossed off ten competences on their score list, there is one who is really a whole lot better (!) than the other?

Movement 4. From payoff to value, from result to ‘Bildung’. When determining the quality of education provided both by primary and secondary schools and by teacher colleges, we mostly orient ourselves towards payoff. Do the pupils proceed quickly enough? Do students acquire their diplomas fast enough? In this way we regard pupils and students as objects in a system. We need to learn to regard them as subjects again; as responsible persons who use their creativity to act or to take initiatives. In order to achieve this, formation is required, Bildung alongside Ausbildung. How exactly to achieve this is less easy to prescribe, and that is precisely why it is of great importance to discuss this from the angle of concrete practices.

Movement 5. Concerning claims in the field of worldview, life stances, religion, a religious identity of a school or school ethos: from concept-thinking about the school’s identity to the school as a community of values. Normative professionalization requires teachers to think in a fundamental way about the background and legitimization of their own professional actions. If we but
question each other deeply enough, eventually we will talk about someone’s conception of man, someone’s worldview and life stance.

Due to the compartmentalized (or ‘pillarized’) nature of the Dutch educational system, it is difficult to withstand the temptation to think about the life stance orientation of education from the side of the formal, religious school identity. As is to be expected, the fact that two out of three schools in the Netherlands call themselves explicitly religious, like Catholic, Protestant-Christian or Muslim schools, colours the education offered by the schools in question. However, due to the secularization and religious pluralism in society, this effect has become strongly diluted, making the dialogue about identity harder to carry on. Both inside and outside of school, life-stance concepts and their possible meaning(s) are interpreted in diverse ways. A better, more utilizable perspective on the school’s deliberation about identity emerges if we regard the school as a community of values where normative professionals create normative practices through their actions. Ideally, deliberation about identity does not start with a discussion about the (correctness of) the concept, but develops out of a reflection on the normative load of everyone’s professional acting. This reflection inevitably discovers worldviews and life stances, and in this way the conversation will, in a second instance, revolve around a religious or non-religious life stance. It is in this order of reasoning we finally could conclude whether or not and how a school as an organization ‘has’ a worldview or religious identity.

Movement 6. A multi-stage concept of research into normative professionalism: from a straight on description of the normative dimension of educational practices to telling what ‘good education’ looks like. A certain confusion of ideas or even irritation might easily arise when confronted with the conceptual pair ‘normative professionalization’, as if normative professionalization will readily provide an explanation of how teaching should be done, or worse, as if those who investigate normative professionalization know what good teaching should look like. This misunderstanding, which may arise, must be removed. For this reason we distinguish between three ways to look at normative professionalizing.

• Level 1: On the most elementary level, paying explicit attention to normative professionalizing requires one to provide insight into the way normativity plays a role in every professional performance, and in the professionalizing process of a teacher. The ambition at this level is to make explicit that no teaching practice is ever neutral, and to provide a
description of the contents which make up the normative character of a
teaching practice with all the implicit assumptions, values, preferences
etc. At this basic level of research into Normative Professionalization,
the non-neutrality is described in the manner in which it can be
empirically determined by educators and investigators. This research
activity matches closely with the observation that the value dimension
of professional conduct remains more often than not implicit. This is
why we think that this is an important angle, one that can hardly be
overestimated.

• Level 2: On level two, normative professionalization is aimed at teacher
education, i.e. the process we organize to become a professional or to
improve as a professional. The question is how we can ideally challenge,
entice and guide students and teachers to explore and elucidate their own
normativity and orientation towards values.

• Level 3: Only on level three is attention given to normative
professionalization in the sense that it is normative in its own statements;
and only on this level is there an articulation of what constitutes good
professional conduct, of what might possibly be done better, but also what
ought to be judged as ‘bad practice’ and is in that sense undesirable. On
this third level a researcher in Normative Professionalization could claim
his own philosophies of education, and thereby define a vision on ‘good
education’.

As a researcher I would generally desire to be restrained on this third
level, because of the huge job that needs to be done on the levels 1 and 2.
The awareness that every teaching practice is normative and ‘value-laden’ by
itself, is clearly not self-evident and certainly not omnipresent. Neither is it
obvious that a fundamental reflection on this normativity follows as the next
step from this awareness. Research into and interventions on the different
levels of normative professionalization therefore should prioritize the first
two levels. A growing awareness of the normativity of all teaching would be
a good gain and we hope to contribute to this (Bakker, 2013; Biesta, 2010,
2013).

Without doubt, a researcher working on the levels 1 and 2 is not neutral
either. It is good to realize this. E.g. in the asking of certain questions in
teacher interviews or in the ambition to raise a certain awareness the
researcher himself is also a normative professional. In the chapters to come,
and especially in the separate research projects that are dealt with more
explicitly (and probably also implicitly), the normative steps are explored,
attempted and discussed.
Whenever it happens that a lesson, or a contact with a particular student does not go as it was prepared, the interesting question is how the situation further evolves. The teacher is confronted with complexity in his teaching situation and has to respond to the unexpected situation. Easily, many other examples of this type could be imagined. We could enlarge this imaginary situation, by putting it in the words of Figure 1.1 that was presented earlier. If we do, it reads like this:

If the system of education prescribes what a teacher should do, know, measure, etc. and if this teacher primarily sees himself as the instrument through whom the system can be realized and the system will result in ‘good education’, what would this teacher do, then, when he discovers that the teaching reality is much more complex than he expected? How would he perceive this complex situation, what would the shortfall of the system mean to him, and how would he reflect on, and finally react with alternatively developed professional acting? And how will the situation further evolve, then?

When this happens, there is very often the initial tendency to shrink back from such a difficult situation. It belongs to the characteristics of human reasoning to then choose the most plausible explanations and repair strategies as quickly as possible (Kunneman, 2013; Kahneman, 2011). So the argument of this type could be that the teacher experiences complexity, because he thinks that he was not doing exactly what the system prescribes or expects. So the teacher would be asking himself whether he had done his job the right way. And ‘good’ is then defined ‘according to the system’, persisting in the thought that we had arranged everything well in the system. Has he really done what was expected from him according to the system, and if he had done better in this role as an instrument of the system, would the complex situation have not occurred, then? Probably this is the easiest reaction to this situation: to revert back to the system (‘did I perform well according to the system?’). We could illustrate this in the following sketch (Figure 1.2).

Besides this, another reaction could be that the complex situation makes it clear indeed that the system falls short. New insights might be found precisely there, in that difficult situation. We thought that we had arranged everything well in a system, that now turns out to be lacking. We can make important progress in that situation by investigating the technical-instrumental aspects of education and educational processes, and by looking at them with new eyes. Even then the reaction could be focused on the system, by deciding to develop the system further in order that a new grip emerges, even on the more complex situations as we have experienced them. We develop the
system further, mainly by extending the system. To give some examples: if it becomes clear that the reliability of our student assessments raises doubts, we develop an additional ‘rubric’ (evaluation scheme) in order to assess better; or if two history teachers finally turn out to have walked tracks with their groups which are too different, while it was expected that they would realize a parallel and equal track, we develop a much clearer curriculum that has to be followed; or if the problem of bullying in school leads to unmanageable classroom relationships, we decide to develop an anti-bullying protocol. We could illustrate this reaction by means of the following sketch:
In both of these very common reactions, the underlying tendency is that we shrink back in some way from the difficult questions in education and try to reinforce the system. We do this either by doing the job better by implementing our systemic ideas about good education in an improved way, or by extending the system, expecting that next time we will be able to hold a better grip, even if the same difficulties would occur.

The experience of the complexity of the teaching situation can quickly become a painful one, a dolor complexitatis, which of course has to be taken very seriously. The questions asked at the beginning of this paragraph may also sound like: if we ‘suffer’ from dolor complexitatis, how would we react? And we explored already two ways of reacting, which seem to be very common and also reasonable in everyday school life, sometimes.

However, the fundamental characteristic of both reactions is that we deny the complexity of the teaching situation. When complexity unexpectedly pops up, we take our measures by improving ourselves, by making ourselves into better performers (according to the system), or by improving the system, given the undisputed assumption that we should have a system that could ‘organize away’ complexity. Complexity should be banned by developing better control. And in some cases, this seems to be a wise thing to do.

But in addition, we would seriously explore the complexity itself and finally also suggest to take it a step further. The change that we recommend is that we, in experiencing that dolor complexitatis, do not deny the complexity but rather come to recognize and embrace it, and in this way arrive at an amor complexitatis. The assumption here is that complexity can never be banned out right and that a system will always fall short and will never guarantee to cover all occasions. Just as life is complex and unpredictable, the same is true of the teaching-learning process. Our suggestion is that we, in spite of and thanks to that complexity, learn to act well taking the normative professional seriously. This way of reacting could also be illustrated by means of a sketch:

---

**Figure 1.4. Reaction 3: ‘Amor Complexitatis’: Embracing complexity as constitutive part of education**

---
The unpredictability of the teaching-learning context is not only a whimsicality of school life we have to accept, because this is just the way it is and we humbly have to accept this, but it is also a characteristic that productively and pro-actively could be seen as a valuable characteristic and as a characteristic that we could build upon. In the words of Biesta (2013): “At its core, education is about allowing pupils and teachers the freedom to react to each other while recognizing the different perspectives we employ; education is also about enduring the uncertainty about what such an exchange produces in the end.” The real learning and the real development is probably unpredictable to the core.

FROM HORROR TO PASSION

From dolor complexitatis to amor complexitatis and from horror to passion, what is going on here?

We are indebted to Kunneman (2013) who introduced the powerful notions of dolor complexitatis and amor complexitatis. The central theme of this book, ‘Complexity in education’, as brought in the light of the central theme of our research group and under the umbrella of ‘Normative professionalization’, could be developed in an attractive way by using this distinction. The relationship and also the possible tension between a rational-instrumental and a normative perspective on professionalism, is made more fruitful by this distinction as well.

We could stop here, and use this helpful distinction to propose a title for our book: “Complexity in Education: From Dolor to Amor”.

However, we developed some additional thoughts in line with Kunneman’s distinction, which we believe could enrich the theoretical framework and could be helpful for the necessary reflection on an appropriate follow up. Because, having analyzed the different options how complexity could be met and how it possibly could be embraced, the question arises what this might entail for professionalization, both initially in teacher education and in professional daily practices as well.

The first additional reflections are developed by Van der Zande in his contribution to this book, and first came up in one of our monthly meetings in the research group. He proposed the notion of a passio complexitatis as an alternative for Kunneman’s notion of amor complexitatis. On first sight this might seem a funny wordplay, even more funny perhaps for people who have entered the world of classical languages, but this notion of passio is surprisingly rich, precisely because of its double meaning. On the one hand it points at the very popular use of the word ‘passion’ in the sense of
to have a passion for something’. Many dictionaries quote meanings like ‘ardent affection, devotion, strong interest, intense and driving feeling’. Also popular is the saying that we should find our passion in the domain of work, and when have found our passion that we should ‘go for it’. In that sense it is a useful meaning if we consider the move from a dolor to a passion. Instead of a controllable reaction to the confrontation with complexity – in accordance with a system – we move towards a subjective interpretation of what is going on in the complex situation, and we come up with a tailor-made reaction based on our own perceptions and convictions, in other words: in line with our passion.

The interesting double layer of the word ‘passion’ is given with the original connotation of the Greek verb paschoo, the word ‘passion’ is derived from. The connotation of this Greek root also has a reference to ‘suffering, perseverance and endurance’. Going for your passion is not easy. It costs a lot, the price could be high, you could suffer because of it. Dealing with complex situations, realizing that the system, the higher grounds do not offer the certainty that would be comfortable when you are struggling in the swampy lowlands, is a hard job. But satisfying at the same time, because it suits your passions, which might also guarantee that professional acting is more authentic in this way. We also mention here the interesting relativating perspective that is developed in Zuurmond’s contribution. She shows that this double layering is also incorporated in the notion of amor as it is used in Hannah Arendt’s work (ref. amor mundi).

Further additional reflections come from Kunneman’s own work, that introduces the notion of horror complexitatis. People suffering from dolor complexitatis are observed by all kinds of bystanders (relatives, colleagues, students, responsible leaders, etc.). Their “horror is evoked by the dolor of the professional in his actions. This horror is morally ambivalent, because it could either lead to compassion and with this a serious effort to help and try to understand the situation and to see how we (!) could overcome the swampy lowlands situation. Or it could lead to a denial of the complexity of the situation and suppress the feelings of vulnerability, loss of control and finiteness” (Kunneman, 2013, p. 448). In our words, referring to the schemes in this chapter, this horror could lead to an even stronger emphasizing of the system in the hope to gain back control. In this line of thought we could say that the horror of the bystander in a professional role is at the same time his own professional dolor. So we recognize dolor and horror as the same category of feelings and thoughts, leading to the same possible reactions described earlier.
And finally, for esthetical reasons, we chose the title of this book because of this enriched connotation of the notions of ‘horror’ and ‘passion’. The title of the book is: “Complexity in Education: from Horror to Passion”.

REFERENCES

Cok Bakker
Universiteit Utrecht/Utrecht University
Hogeschool Utrecht/HU University of Applied Sciences Utrecht