

# Conceptualisations of learning outcomes in education

-an explorative cross-case analysis of policymakers,  
teachers and scholars

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To the most precious ‘learning outcomes’ of my life  
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## Summary of the thesis

This article-based thesis presents the findings of an exploratory qualitative multiple case study of how learning outcomes are conceptualised in education policy.

Learning outcomes is considered a key concept in a changing education landscape. International organisations with influence on national education policy present one commonly shared understanding of learning outcomes. However, the review of outcomes literature in this study illustrates that the concept is contested in research, with a debate deeply rooted in issues of what constitutes learning and how it can be valued. This contradiction between different understandings of the concept of learning outcomes calls for a closer look at how the concept is understood in education. While contradictory concepts in education are not unusual, in this case it seems important to explore what understandings are at play to avoid taking them for granted and enable an informed and open debate of what should be valued and appreciated as learning.

The multiple case study consist of three individual case studies each presented in one paper.

Study 1 illustrates how learning outcomes is contested among scholars. Two broad clusters of conceptualisations of the concept have been identified. In the established cluster learning outcomes is considered as results-oriented, full ended and measurable. In the alternative cluster, learning outcomes is understood as process-oriented, open-ended and with limited measurability. The majority of the scholars studied consider learning outcomes as a concept for the purpose of educational, instructional planning and curriculum development – thus with an internal focus. The study illustrates how several conceptualisations are at play within academia.

Study 2 illustrates how teachers conceptualise learning outcomes when describing their grading practices. At an overall level teachers report to understand learning outcomes in compliance with the national curriculum and regulations for grading of the outcome based reform of 2006. It also displays a tension between characteristics of school subjects and universal regulations for grading. The study suggests that in the eyes of teachers different subjects have different degrees of challenges in fulfilling government recommendations and universal regulations for grading within an outcomes based system, some being more easily adaptable than others.

Study 3 explores how Norwegian policymakers conceptualise learning outcomes during a period of 14 years. The study illustrates how policymakers in subsequent governments have embraced the concept. It also illustrates that the concept is not a controversial policy issue in itself and that policymakers understand it as results-oriented, full-ended and measurable. Policymakers use the

concept in relation to the external purpose of accountability. However, the study also suggests that under a consistent learning outcomes umbrella, governments introduce a variety of often contradictory policy initiatives, e.g. monitoring of outcomes for decentralisation and local accountability vs. monitoring of outcomes for more central state control, possibly downplaying local accountability.

The cross-case analysis of the three studies suggests that there is an overall established and dominant understanding of learning outcomes. It also identifies alternative approaches to the concept presented by scholars and teachers. The analysis illustrates how several understandings are at play in practical language use between and within groups of actors. The study proposes a four-part model for the identification of conceptualisations of learning outcomes. The findings of the study indicate that a dominant conceptualisation limits the understanding of learning outcomes while other available understandings are seemingly left unexplored by the actors studied.

The study contributes methodologically to the field of learning outcomes by studying learning outcomes as conceptualised by the speech acts of three groups of actors. It contributes theoretically to the field by presenting a theory-based analytical framework, which over the course of the study advances into an empirically grounded four-part model for conceptualisation of learning outcomes.

The study is relevant in the way it offers a model for consideration of different approaches to learning outcomes in education, and in its potential for identification of practices that manage to balance external requirements of policymakers with internal requirements of education.

## Sammendrag

I denne artikkel baserte avhandlingen presenteres resultatene fra et eksplorativt case studie av hvordan begrepet læringsutbytte forstås i utdanning.

Læringsutbytte anses å være et nøkkel begrep i et internasjonalt så vel som nasjonalt utdanningslandskap i endring. Internasjonale organisasjoner med innflytelse på nasjonal utdanningspolitikk har presentert et læringsutbyttebegrep kjennetegnet av en felles forståelsesramme. Denne avhandlingens litteraturgjennomgang viser at begrepet er omstridt innenfor forskning, og at det pågår en diskusjon i akademia dypt forankret i spørsmål om hva læring er og hvordan læring kan anerkjennes. Denne motsetningen, mellom forståelser av læringsutbytte, antyder at det er en uklarhet omkring begrepets betydning blant sentrale aktører i utdanning. Begreper med ulike forståelser er ikke uvanlig innenfor utdanningsfeltet, i dette tilfellet synes det viktig å utforske hvilke forståelser som anvendes for å unngå å ta dem for gitt og muliggjøre en informert og åpen debatt om hva som anerkjennes som læring.

Avhandlingen er en kvalitativ multiple case studie. Funn fra tre individuelle case studier beskrevet i tre artikler er syntetisert i en cross-case analyse og presenteres her i denne avhandlingens kappe.

Case studie 1 illustrerer hvordan læringsutbytte er omdiskutert blant forskere internasjonalt. Studiet identifiserer to grupper av forståelser; *etablerte* og *alternative* forståelser. I gruppen for etablerte forståelser beskrives læringsutbytte som resultat-orientert, med endelige målbeskrivelser og som målbart. I gruppen for alternative forståelser blir læringsutbytte beskrevet som prosess-orientert, med åpne målbeskrivelser og begrenset målbarhet. Majoriteten av forskerne anser læringsutbytte å være til for planlegging av undervisning og læreplanutvikling, det vil si i første rekke for et internt formål. Studie 1 illustrerer at det finnes ulike konseptualiseringer av læringsutbytte i akademia.

Case studie 2 illustrerer hvordan norske lærere forstår begrepet læringsutbytte gjennom sine beskrivelser av hvordan de setter standpunkt karakterer. På et overordnet nivå rapporterer lærerne i studien en forståelse av læringsutbytte som er i overensstemmelse med nasjonal læreplanen og regelverk for karaktersetning. Studien indikerer at lærerne i ulike fag forstår læringsutbytte forskjellig og at det finnes varierte forståelser av begrepet. I studien argumenteres det for at det er en spenning mellom praksis for karaktersetning i ulike fag og universelt utformede regler for karaktersetning. Studien indikerer at lærere anser ulike fag å ha ulike utfordringer i å oppfylle

myndighetenes anbefalinger og regelverk for karaktersetting i et læringsutbytte orientert system, der noen fag synes å være lettere å tilpasse enn andre.

Case studie 3 illustrerer hvordan norske politikere forstår læringsutbytte over en periode på 14 år. Studien illustrerer hvordan politikere i ulike regjeringer har omfavnet begrepet. Den viser også hvordan begrepet ikke er et kontroversielt politikk spørsmål i seg selv. Norske politikere forstår i hovedsak læringsutbytte som resultat-orientert, med endelige målbeskrivelser og som målbart, først og fremst til bruk for et eksternt formål som ansvarliggjøring/accountability. Studien viser også at innenfor en og samme læringsutbytte-forståelse introduserer påfølgende regjeringer variert og motsetningsfylt politikk, for eksempel måling av læringsutbytte for desentralisering og lokal ansvarliggjøring vs. måling av læringsutbytte for forsterket statlig kontroll og eventuell nedskalering av lokal ansvarliggjøring.

Funnene fra cross-case analysen av de tre studiene tyder på at det finnes en etablert og dominant forståelse av læringsutbytte. Det er også identifisert alternative tilnærminger til begrepet slik det er presentert av forskere og lærere. Analysen viser at forståelsene av læringsutbytte varierer i praktisk språkbruk både mellom og innenfor aktørgruppene i studien. Funnene i studien indikerer at en dominant konseptualisering av læringsutbytte begrenser hvordan begrepet forstås og at andre tilgjengelige forståelser synes å være uutforsket av aktørene i studien. I avhandlingen argumenteres det for en modell for identifisering av konseptualiseringer av læringsutbytte.

Studien bidrar metodisk til læringsutbytte feltet gjennom å ha studert begrepet slik det konseptualiseres i talehandlinger hos tre grupper av aktører i utdanning. Den bidrar teoretisk til feltet ved å presenterer et teoretisk basert analytisk rammeverk som gjennom studiens gang avanserer til en empirisk forankret modell for konseptualisering av læringsutbytte.

Studien er relevant gjennom å tilby en modell for vurdering av ulike tilnærminger til læringsutbytte i utdanning, og den kan også bidra til identifisering av praksiser som evner å balansere myndigheters eksterne krav og interne behov i skole og utdanning.



## List of papers

Prøitz, T. S. (2010). Learning outcomes - What are they? Who defines them? When and where are they defined? *Educational assessment, evaluation and accountability*.  
22(2), 119-137

Prøitz, T. S. (2013). Variations in grading practice – subjects matter.  
*Education Inquiry*, 4(3), <http://dx.doi.org/10.3402/edui.v4i3.22629>

Prøitz, T. S. (2013). Learning outcomes as a key concept in policy documents throughout policy changes.  
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## Table of contents

<b>CHAPTER 1: INTRODUCTION.....</b>	<b>1</b>
AN EXPLORATIVE STUDY OF LEARNING OUTCOMES IN EDUCATION .....	1
DEFINING LEARNING OUTCOMES.....	2
LEARNING OUTCOMES AS A CONTESTED CONCEPT IN RESEARCH.....	3
MOTIVATION FOR THE STUDY .....	4
STUDY QUESTIONS AND UNITS OF ANALYSIS.....	4
OUTLINE OF THE THESIS .....	6
<b>CHAPTER 2: LITERATURE REVIEW .....</b>	<b>7</b>
LEARNING OUTCOMES IN SCHOLARLY WORK.....	8
<i>Two different perspectives on learning outcomes.....</i>	<i>9</i>
<i>Learning outcomes and objectives.....</i>	<i>10</i>
<i>Proponents of learning outcomes-based education.....</i>	<i>11</i>
<i>Outcomes based education (OBE) – the ideas of Spady.....</i>	<i>12</i>
<i>Alternative perspectives on learning outcomes.....</i>	<i>13</i>
LEARNING OUTCOMES AND TEACHERS’ GRADING PRACTICES .....	14
<i>Teachers’ grading practice.....</i>	<i>15</i>
<i>Grading practices in different school subjects.....</i>	<i>17</i>
<i>Learning outcomes, knowledge and curriculum content.....</i>	<i>18</i>
LEARNING OUTCOMES IN POLICY .....	20
SUMMARY .....	25
<b>CHAPTER 3: CONCEPTUAL, THEORETICAL AND ANALYTICAL FRAMEWORK OF THE STUDY.....</b>	<b>27</b>
INTRODUCTION – PREPARING AND DELIMITING THE CONCEPTUAL ANALYSIS .....	27
MOVING TOWARDS A THEORETICAL AND ANALYTICAL FRAMEWORK.....	29
<i>An argument for the choice of theory.....</i>	<i>30</i>
<i>Construction of social reality.....</i>	<i>32</i>
THEORETICAL AND ANALYTICAL FRAMEWORK .....	34
<b>CHAPTER 4: METHODOLOGICAL APPROACH.....</b>	<b>37</b>
INTRODUCTION.....	37
FIVE COMPONENTS OF THE CHOSEN RESEARCH DESIGN .....	38
<i>Study questions.....</i>	<i>38</i>
<i>Study propositions.....</i>	<i>39</i>
<i>Units of analysis.....</i>	<i>39</i>
<i>Linking data to propositions.....</i>	<i>40</i>
<i>Criteria for interpreting the findings .....</i>	<i>40</i>
THE CASE STUDY METHOD .....	40
SELECTION OF DOCUMENTS AND INFORMANTS .....	43
<i>Scholars.....</i>	<i>43</i>
<i>Teachers.....</i>	<i>44</i>
<i>Policymakers.....</i>	<i>44</i>
DOCUMENT ANALYSIS AND INTERVIEWS.....	45
<i>Proceedings of the two document analyses.....</i>	<i>46</i>
<i>Proceedings of the interviews .....</i>	<i>47</i>
TEXT AND DISCOURSE.....	48
<i>Interpretation of the different data material.....</i>	<i>49</i>
CHOICE OF METHODS AS PROBLEM-DRIVEN .....	49
THE QUALITY OF THE STUDY .....	50
ETHICAL ISSUES FOR CONSIDERATION.....	51

<b>CHAPTER 5: CROSS-CASE ANALYSIS AND SUMMARY OF PAPERS.....</b>	<b>53</b>
INTRODUCTION.....	53
ONE-DIMENSIONAL CROSS-CASE ANALYSIS OF DEFINITIONS.....	53
<i>Learning outcomes defined by scholars Prøitz (2010) .....</i>	<i>53</i>
<i>Learning outcomes defined by teachers Prøitz (2013a).....</i>	<i>54</i>
<i>Learning outcomes defined by policymakers (Prøitz 2013b).....</i>	<i>55</i>
SUMMARY CROSS-CASE ANALYSIS OF DEFINITIONS .....	55
TWO-DIMENSIONAL CROSS-CASE ANALYSIS OF CONCEPTUALISATIONS .....	56
<i>Scholars .....</i>	<i>56</i>
<i>Teachers .....</i>	<i>56</i>
<i>Policymakers .....</i>	<i>57</i>
CROSS CASE SUMMARISED .....	58
<b>CHAPTER 6: DISCUSSION, CONCLUSIONS AND IMPLICATIONS .....</b>	<b>61</b>
INTRODUCTION.....	61
ONE DIMENSIONAL CROSS-CASE ANALYSIS OF DEFINITIONS OF LEARNING OUTCOMES .....	61
ISSUES BROUGHT FORWARD BY THE TWO-DIMENSIONAL CROSS-CASE ANALYSIS.....	62
<i>Learning outcomes – a contested concept in scholarly work.....</i>	<i>63</i>
<i>Learning outcomes and the role of subjects in teachers’ grading practices .....</i>	<i>65</i>
<i>Learning outcomes – a concept taken for granted by policymakers.....</i>	<i>67</i>
THE DOMINANT PERSPECTIVE AND EXPLORATION OF AN EMPTY QUADRANT .....	69
CONCLUSIONS, MODIFICATION OF THEORY AND IMPLICATIONS OF THE STUDY .....	72
<i>Conclusions.....</i>	<i>72</i>
<i>Modification of theory.....</i>	<i>72</i>
<i>Contributions, limitations and recommendations for further conceptual research.....</i>	<i>73</i>
<i>More general implications of the study.....</i>	<i>76</i>
<i>Author’s comment.....</i>	<i>76</i>
<b>REFERENCES: .....</b>	<b>79</b>
<b>APPENDICES .....</b>	<b>87</b>
APPENDIX I: DEFINITIONS OF LEARNING OUTCOMES.....	87
APPENDIX II: INTERNATIONAL AND NATIONAL CONTEXT OF THE STUDY.....	89
APPENDIX III SELECTION STRATEGY (PRØITZ 2013A).....	94
APPENDIX IV: READING GUIDE DOCUMENT ANALYSIS (PRØITZ 2010).....	95
APPENDIX V: SEARCHING FOR THE KEY CONCEPT (PRØITZ 2013B) .....	96
APPENDIX VI: CONCERNING THE NUMBER OF CASES.....	97
APPENDIX VII: ETHICAL CONSIDERATIONS IN INTERVIEWS IN PRØITZ (2013A) .....	98
APPENDIX VIII: INTERVIEW GUIDE (PRØITZ 2013A) .....	100
<b>LIST OF FIGURES AND TABLES .....</b>	<b>102</b>
<b>THE PAPERS OF THE THESIS .....</b>	<b>103</b>
STUDY 1 PRØITZ (2010) .....	103
STUDY 2 PRØITZ (2013A).....	123
STUDY 3 PRØITZ (2013B).....	144

# Chapter 1: Introduction

## **An explorative study of learning outcomes in education**

This exploratory study of the concept of learning outcomes<sup>4</sup> has its grounding within the field of education policy<sup>5</sup>. Drawing on qualitative data material from three case studies this article-based thesis presents a study of the concept of learning outcomes in education. Instead of a traditional approach focusing exclusively on education policy as shaped by policymakers, this study applies a ‘vertical’ approach focusing on the voices of researchers and teachers as well as policymakers.

Learning outcomes is considered a key concept in a changing education policy landscape (Lassnigg 2012, Hargreaves & Moore 2000, Lawn 2011, Ozga 2009, Hopmann 2008, Aasen 2012, Fuller 2009, Shepard 2000, 2007). It has been presented as a central element in a paradigm shift in education characterised as a change in emphasis from teaching to student learning (Adam 2004, Shepard 2000, Ewell 2005). Internationally, the concept is presented as of one consistent understanding, while research literature indicates that it is contested by issues deeply rooted in questions of what constitutes learning and how it should be valued. This contradiction calls for an exploration of the concept of learning outcomes in education policy to avoid taking it for granted and enable an informed and open debate on what should be valued as learning.

As the concept of learning outcomes has been presented as being applicable to all learning (Burke 1995, Jessup 1995) no borders have been drawn in this study, to focus only on certain levels or types of education. Rather, the study deliberately discusses the issue as seen from a wide range of perspectives. The three case studies provide empirical illustrations for the discussions and the conclusions of the study are related to their contexts, and to some extent delimited by them, although the

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<sup>4</sup> In this thesis the Norwegian term ‘læringsutbytte’ has been considered as more or less synonymous with the English term ‘learning outcomes’.

<sup>5</sup> A policy is typically described as a principle or rule to guide decisions and achieve rational outcome(s) (Dahler-Larsen 2003). Education policy can be considered to refer to decisions made by bodies with legal and legitimate authority often constituted by legislation, regulations, curricula, and framework plans (Aasen et al. 2013).

implications brought out by the case study as a whole can be considered relevant and applicable to a wider range of educational settings.

### **Defining learning outcomes**

A wide range of initiatives in education have been brought forward by international organisations such as the OECD, European Union, The World Bank, UNESCO and EHEA for improving the learning outcomes of all students. This can be seen by the introduction of international studies of student performance such as PISA, TIMSS and PIRLS, qualification frameworks for the enhancement of transparency and comparability of competences and for the monitoring of quality in education. In Norway, similar developments can be seen in efforts made for the development of a more outcome-based education during the last 15 years (Hatch 2013, Aasen et al. 2012, OECD 2011).

In the work on learning outcomes presented by the European Higher Education Area (EHEA) and the European Union, similar definitions of the concept can be observed. A number of selected definitions of learning outcomes closely resemble each other providing a commonly accepted definition that has been brought forward (see Appendix I for definitions) (Kennedy et.al 2007, Adam 2004)<sup>6</sup>. The key aspect of these definitions of learning outcomes is their focus on the achievements of the learner rather than the intentions of the teacher. It has also been pointed out that there is not one correct way of working with learning outcomes and that learning outcomes take many forms (Adam 2004, Kennedy et al. 2007, EU 2011).

Adam (2004:19) concludes a brief overview of recent usages of learning outcomes in Europe by reporting that there is a “commonly shared understanding” of learning outcomes, but that it is not safe to assume a common understanding in the detailed practical application of learning outcomes. He recommends a more detailed survey of national implementation of learning outcomes as it may reveal profound differences in understanding and practice (Adam 2004: 19).

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<sup>6</sup> Definitions provided: “A learning outcome is a written statement of what the successful student/learner is expected to be able to do at the end of the module/course unit, or qualification” (Adam 2004:5). “Learning outcomes are statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of a process of learning” (Kennedy et al. 2007:5). “Learning outcomes have been defined as a statement of what a learner is expected to know, understand, or be able to do at the end of a learning process (European Union 2011).

Similar conclusions are presented in a joint Nordic project undertaken by the Nordic Quality Assurance Network for Higher Education (NOQA). It reported that the definition of learning outcomes is similar across the participating Nordic institutions. Learning outcomes are defined as the qualifications and competences a student is expected to have on completion of learning; however the understandings used when describing learning outcomes varies among the institutions (Gallavara et al. 2007). The project also concludes that the Nordic countries have different approaches to the interpretation and implementation of learning outcomes (Gallavara et al. 2007).

### **Learning outcomes as a contested concept in research**

Parallel to the developments in education policy framed by commonly shared definitions of learning outcomes, an ongoing debate in the research literature has questioned what the learning outcomes concept is, what it means, what its purposes are, and how learning outcomes can be measured. Within an international context, the concept of learning outcomes in education has been studied and discussed from a wide range of angles and different perspectives (Allan 1996; Davies 2002; Hussey and Smith 2002, 2003, 2008; James and Brown 2005; Ewell 2005; Buss 2008; Nusche 2008; Spady 1988; Spady and Marshall 1991; King and Evans 1991; Brady 1996; 1997, Capper and Jamison 1993; Hargreaves and Moore 2000; Jessup 1991; Burke 1995, Eisner 1979, 2005). In this body of literature several definitions and categorisations of learning outcomes can be observed, indicating that the concept is contested.

In Norway, researchers have studied the learning outcomes of education but few have discussed or investigated the meanings or understandings of the concept empirically. In most of these studies different types of defined learning outcomes are defined and measured for the purpose of making claims about other issues in education (e.g. student progression, drop out and completion rates, results of interventions, quality). In this literature learning outcomes are often defined in terms of results of different types of formal assessment (Imsen 2003, Øzerk 2003, Lødding et al. 2005, Opheim et al. 2013, Bakken and Elstad 2012). Thus, within the Norwegian context the concept has seldom been the main focus of study. Except for a few recent studies discussing theoretical perspectives on learning outcomes and how they can be operationalised

and empirically measured in higher education (Aamodt et al. 2007, Karlsen 2011, Caspersen et al. 2012), few empirical studies concerning the meaning and the use of the concept can be found. An empirical study into how the concept of learning outcomes is conceptualised by three different groups of actors in education should provide an important contribution to the knowledge base on learning outcomes.

### **Motivation for the study**

The personal choice of this thesis topic was inspired by work-related experiences during my previous occupations as a government official who used the concept of learning outcomes in multiple ways during the policymaking process. The topic was also inspired by my current profession as a researcher in education studying the processes of policy making as seen from the perspectives of a variety of stakeholders. Together, these experiences have provided insight into the varied perspectives, understandings, and efforts that people make within the field of education, and the way they shape policymaking into the complex and messy enterprise it is. These experiences have also helped me develop an understanding of how ideas in education policy emerge, develop, and are implemented and operationalised at different levels and by different actors.

What has often struck me is how important language, words, and concepts often are in shaping policy at both the intentional and operational levels. In that sense, education can be characterised as a highly abstract phenomenon defined by the very concepts that are in use. This led me to reflect on how learning outcomes are conceptualised in education. As I consider education policy to be shaped by the concepts used by the people involved, investigating the concept of learning outcomes through the language used by central actors in the field of education emerged as an interesting and relevant topic.

### **Study questions and units of analysis**

This study aims to illuminate the phenomenon of learning outcomes from the perspectives of three groups of actors in education: scholars, teachers, and policymakers. A multiple case study approach has been applied, and three sources of qualitative data material have been explored in three separate studies, each being reported in one paper. The overall purpose of the study is to explore how the concept of learning outcomes is conceptualised in education by these different actors in



different contexts, and to develop theoretical propositions leading to a heuristic devise for enabling an enhanced understanding of the concept of learning outcomes.

The overarching study question for this case study is as follows:

*How is the concept of learning outcomes conceptualised in theory and practice by different actors in different educational contexts?*

To answer the overarching study question, I have specified three study questions studied in three separate cases:

- Study 1: *How is the term “learning outcome” defined? By whom? When? Where?* (Prøitz 2010)
- Study 2: *How do teachers approach grading in different school subjects? How do their grading practices in the different subjects correspond to recommendations and regulations for grading? What are the implications for the validity of indicators of learning outcomes based on students’ grades?* (Prøitz 2013a)
- Study 3: *How are learning outcomes conceptualised in policy documents? To what extent and in which ways is the concept of learning outcomes used?* (Prøitz 2013b)<sup>7</sup>

The thematic focus of the study is to answer the study question by synthesising the results of the three empirical studies and draw cross-case conclusions about how actors in education conceptualise the concept of learning outcomes. The unit of analysis in this investigation is the conceptualisation of learning outcomes, and its boundaries are defined by the three individual cases of how actors in education conceptualise learning outcomes in their particular context. The case study is framed by the study questions, a common theoretical platform, and a mainly qualitative methodological approach.

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<sup>7</sup> All three studies were conducted in alignment with the study question and purpose of this explorative study. Studies 1 and 3 were conducted exclusively for the purpose of this thesis. Study 2 was an integrated part of a larger research project funded by the Norwegian Directorate of Education and Training; the results of the project are reported in Prøitz & Borgen (2010).

Due to the explorative purpose of the study, efforts have been made to cover a wide range of aspects in education. The study shifts between emphasising learning outcomes as a worldwide education policy issue and as a policy issue within the national context of Norway seen from the perspectives of international scholars, Norwegian teachers, and Norwegian policymakers. A choice has been made to keep a 'moderate distance' from the particularities of the Norwegian education system, as the ambition of the study is to identify and discuss conceptualisations as an overall concept supported by empirical illustrations. However, context is of importance and therefore a comprised context description of education policy developments with relevance for learning outcomes within a global framing as well as the Norwegian framing is presented in Appendix II.

The investigation was framed by keeping a focus on the concept of learning outcomes. Another line of demarcation in the study is the application of Adam's (2004) propositions as a set of guiding principles for the study.

### **Outline of the thesis**

The thesis is organised into six chapters. The first chapter briefly introduces the issues explored in the thesis, study questions, aim and purpose of the study, choice of methods, and units of analysis. In Chapter Two, a body of literature on learning outcomes is presented along three guiding dimensions: learning outcomes in scholarly work, learning outcomes and teachers' grading practices, and learning outcomes in policy. Chapter Three sets out the conceptual, theoretical, and analytical framework of the study, and is followed by a description of the methodological approach in Chapter Four. In Chapter Five, the findings of the three cases are summarized and presented in a cross-case analysis. In Chapter Six, the results from the cross-case analysis are discussed, a conclusion is drawn, theories are modified, limitations of the study are discussed, and some implications are presented.

## Chapter 2: Literature review

A literature review can be characterised as a three-part exercise: scoping, mapping and focusing, with the aim of discovering what has been said about the topic in question (Thompson 2012). As the topic of this study is learning outcomes, and the aim is to identify how the concept is conceptualised, the review is limited to literature addressing this concept in particular<sup>8</sup>. Thus, studies investigating the learning outcomes of education for purposes other than investigating the concept have not been included in the review.

The literature on learning outcomes is varied and multifaceted, and it has been necessary to establish a delimiting frame to focus this review. The review is organised around three guiding themes grounded in the overarching study question and the choice of actors studied: learning outcomes in scholarly work, learning outcomes and teachers' grading practices, and learning outcomes in policy. Before going into detail about the three themes of this review, a few aspects concerning literature on the concept within the Norwegian context are presented.

In this thesis, the concept of learning outcomes is considered to be a relatively new concept within the Norwegian context, having been introduced to Norwegian education policy over the last 15 to 20 years. To avoid being ahistorical, searches for Norwegian literature discussing learning outcomes from 1945 until today were conducted<sup>9</sup>. These searches cannot be assumed to have been exhaustive, but in general they identified few results. Scholars in Norway seldom used the concept until the beginning of the 1990s. A few scholars used the concept to label results of education in the late 1980s and the beginning of the 1990s, but did not discuss the concept in great depth (Monsen 1987, Ommundsen 1995, Kårhus 1994). One study discusses a related concept, "utdanningsutbytte"/"education outcomes" (Skålnes et al. 1999), inspired by a sociological approach focusing on other aspects of education than

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<sup>8</sup> In this extended abstract, a broad intake to literature discussing the concept of learning outcomes has been pursued. In Prøitz (2010) differences between literature discussing the concept in higher education or compulsory education were an issue, this distinction has not been considered here as the focus of the extended abstract has been to identify conceptualisations of learning outcomes as an overall concept.

<sup>9</sup> Searches were done in BIBSYS, Norart, Idunn, Google, Google Scholar and the National Library of Norway Digital literature database during spring 2013.

learning, and as such goes beyond the scope of this study<sup>10</sup>. The scarcity of Norwegian literature discussing the issues of learning outcomes has been explained in reference to a tradition focusing on the processes of teaching rather than defining particular knowledge requirements, which was prominent throughout the 1960s, 1970s and 1980s (Dale & Wærness 2006). The situation has been characterised as a particular feature of the Norwegian education system partially due to a misunderstanding of progressive ideas of the 1970s, leading, among other things, to a rejection of empirical research as excessively positivist (Dale & Wærness 2006) (see Appendix II for more on the Norwegian context). As a contrary example, Swedish progressive teachers have been described as having a role as important initiators for the introduction of an empirical approach to assessment as an aid to develop teacher professionalism through the use of standardized testing in the early 1930s (Lundahl & Waldow 2009).

However, the searches identified Norwegian and Danish literature discussing objectives in teaching related to the theories of Gagne' and Bloom and the education technology of the 1970s, as well as the theories of Eisner and Tyler (Ålvik 1972, Ulstrup Engelsen 1973, Imsen 1984). The searches indicate a low degree of usage of learning outcomes by Norwegian scholars until the 1990s. But it also indicates that teaching by objectives was a part of the literature on teacher education, studies of education, and pedagogy in higher education in the 1970s and the 1980s. The following section presents a closer look at these and related issues as discussed in international literature.

### **Learning outcomes in scholarly work**

In the initial stages of this thesis, electronic searches<sup>11</sup> were conducted to identify the very earliest uses and discussions of the concept of learning outcomes. However, it rapidly became clear that being certain about 'firstness' is difficult. What seems to be certain is that Robert L. Gagné and Elliott W. Eisner were leading advanced

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<sup>10</sup> In this thesis a distinction is made between outcome (which is taken to mean something that happens to the individual student) and output (which is taken to mean something that an institutions does, e.g. measures like number of students, teaching hours, different types of services and research) (Ewell 2005). The education outcomes of Skålnes (1999) are considered as output rather than outcomes according to this understanding.

<sup>11</sup> Searches were done in a variety of databases; ISI web of science, ERIC, SwetWise, BIBSYS, Google Scholar, Google

discussions on the concept in question when others were struggling with objectives and aims (Allan 1996).

### **Two different perspectives on learning outcomes**

Gagné (1974) and Eisner (1979, 2005) each made key contributions to the discussion of learning outcomes. The following section presents elements of their perspectives on learning outcomes.

Gagné was concerned with instructional design and interested in determining the kind of learning required to accomplish certain tasks involving planning and sequencing (Burke 1995:59)<sup>12</sup>. He described the process of learning as activated by a variety of stimuli as input to the process of learning. The output he considered as modification of behaviour observed as human performance (1974:48). His theory is seen as a fit with an objectives model of the curriculum, which pre-specifies exactly what has to be learned (Ing 1978:69). Gagné has been labeled a behaviourist (Burke 1995), but draws on both behaviourist (associationist) and gestalt (cognitivist) traditions (Ing 1978:65). As his main concern was pedagogy, Gagné says little about knowledge except as a category of learning outcomes (1974:68). Based on his focus on teachers as interventionists and facilitators in the learning process it has been argued that he takes curriculum content for granted (Ing 1978:100).

Eisner criticises the objectives model presented by Gagné and Tyler for being overly optimistic about the uses of objectives in classrooms, and oversimplifying prescriptions for the formulation of objectives and identification of criteria (2005). Eisner argues that how objectives should be stated or used is not a question of technique but of value, and that differences in conceptions of objectives stem from differences in conceptions of education (illustrating the point by education as; industry (Taylorism), behaviour (Thorndike, Mager) and biology (Dewey)) (2005). He argues that it is appropriate for teachers to plan activities with no precise or explicit objectives, and emphasises that the purposes of schooling do not have to

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<sup>12</sup> Gagné defines a learning outcome as something that "...makes possible a refined understanding of the learning process and thus permits a drawing of relatively precise implications for the design of instruction" (1974:51).

precede activity but can be formulated in the process of action. Eisner is often labeled a pragmatist and social constructivist (Allan 1996)<sup>13</sup>.

The presented perspectives provide two different views on the concept in question and how it is framed within different approaches to learning. The following section further explores the relation between learning outcomes and the issue of objectives as presented in the literature.

### **Learning outcomes and objectives**

The previous discussion illustrates how the concept of learning outcomes has historically been closely linked to discussions on objectives in education and the theoretical fundament of the early work in curriculum design by objectives (Eisner 2005; Allan 1996; Ewell 2005; Jessup 1991; Burke 1995). The fact that the two terms are often intertwined in the literature makes it difficult to distinguish between them. The use of labels in the literature of curriculum design is described as a minefield of terminological confusion regarding purpose and educational intention, due to the liberal use of terms such as ‘aims’, ‘objectives’, and ‘learning outcomes’ (Allan 1996). Allan question to what extent outcomes are synonymous with objectives, and underscore the importance of clarifying the multifaceted term ‘objective’ before making claims about a shared meaning between outcomes and objectives (1996). An objective typically express educational intent, but there is a myriad of definitions of ‘objective’, and these typically vary according to a number of factors, including to whom the objectives are directed (e.g. teachers or students), what the objectives focus on (e.g. behaviour or content), and the specifications of standards defining levels of performance<sup>14</sup>.

Eisner’s perceptions of learning outcomes has been described as a significant turning point for the potential usage of outcomes in curriculum design today (Allan 1996:100). His definition of learning outcomes as a broad overarching consequence of learning without stringent criteria applicable to behavioural objectives, helped open

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<sup>13</sup> Eisner defines learning outcomes as “...essentially what one ends up with, intended or not, after some form of engagement” (1979:101).

<sup>14</sup> Allan has identified significant stages in the specification of objectives over time: *educational objectives* presented by Tyler in the 1950s, *instructional objectives* presented and discussed by Mager and Popham et al. in the 1960s, *behavioural objectives* described by Macdonald-Ross in the 1970s, *behavioural and non-behavioural objectives* described by Cohen and Manion, and *expressive objectives* described by Eisner in the late 1970s.

up a necessary decoupling of subject-specific outcomes and behavioural objectives (Allan 1996). However, the decoupling of assessment from standards of performance does not imply that assessment does not remain at the core of a learning outcome-based curriculum. Rather, the more outcomes are expressed, the more the learner is able to concentrate on what he or she needs to know to have success on a given module or course (Allan 1996).

### **Proponents of learning outcomes-based education**

The critique made by Eisner (1979, 2005) towards Gagné and Tyler and the points made by Allan (1996) concerning the relation between outcomes, objectives and behaviourism can also be found in other scholarly contributions. Outcomes-based approaches have been heavily criticized and rejected for being reductionist and fragmented due to a perceived link between behaviouristic perspectives on learning and the concept of learning outcomes (Stenhouse 1975, Smyth and Dow 1998, Hussey and Smith 2003, 2008, Burke 1995).

The argument is explained as follows: Because of the link between learning outcomes and objectives, they must also share the assumptions and principles of various objective models and thus become subject to similar criticisms (Burke 1995:56). It is argued that objective models are not dependent on the behavioural psychology understood as a kind of ‘Skinnerian’ behaviourism; they are outcomes approaches directed at liberating and empowering students rather than controlling and modifying behaviour (Burke 1995:67).

Outcome theories of today, such as the Outcome-Based Education Movement (OBE) in the United Kingdom (Jessup 1991, 1995) and the United States (Spady 1988, 1991, 1994), are characterised by their advocates to be applicable to all forms of learning, accessible to far more individuals, and efficient and cost-effective. Significant features of the OBE described are that learning objectives are specified as outcomes independent of traditional learning and assessment processes, and that this allows different modes, contexts, and time scales for learning to be used (Jessup 1995:36). In the following section the work of William Spady has been selected for more detailed discussion, as he is seen as the founding father of outcomes-based education (OBE)

by a substantial group of scholars (Brady 1996, 1997, King & Evans 1991, Furman 1994, Capper & Jamison 1993, Harden 1999, Killen 2000, 2007).

### **Outcomes based education (OBE) – the ideas of Spady**

A significant part of the outcomes literature calls attention to the outcomes-based education (OBE) movement, which originated in the United States in the 1980s and is associated with the work of William Spady (Capper & Jamieson 1993, King & Evans 1991). The origins of OBE can be traced back to several key ideas in American education<sup>15</sup>, and OBE can be considered to combine these ideas into a consistent reform addressing several problems in education (Furman 1994:418)<sup>16</sup>.

Spady described OBE as a paradigm of schooling organised for results, meaning: “...basing what we do instructionally on the outcomes we want to achieve, whether in specific parts of the curriculum or in the schooling process as a whole” (1988:5). He argued that the a major problem with the prevalent educational paradigm was the way schools were organised by calendars, clocks, and schedules, meaning that knowledge was defined through time blocks within which students must master content, rather than when they master it (Spady 1988). OBE represents a critique of traditional curriculum approaches, wherein the curriculum is determined primarily by content in textbooks rather than by the alignment of desired outcomes (Capper & Jamison 1993). Curriculum development and use becomes essential through a premise of ‘the curriculum alignment movement’, in which it is required that desired outcomes are specified *a priori* in the design of the educational program, described as a reversal of contemporary practices (Furman 1994:419).

Even though Spady (1988:8) considered OBE to be too challenging for the prevalent paradigm, the ideas were accepted broadly in the United States in the early 1990s<sup>17</sup>.

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<sup>15</sup> These ideas include Tyler’s *Basic Principles of Curriculum and Instruction* (1950), principles of mastery learning inspired by Bloom’s taxonomy and Mager’s work on behavioural objectives, and a movement towards criterion-referenced assessment described by Glaser (1963) (King & Evans 1991, Furman 1994).

<sup>16</sup> The OBE movement is seen in relation to social forces pressuring schools in the United States in the 1970s based on an acknowledgement that schools were failing their mission and a growing belief in the importance of education for success. Together these ideas led to a demand for evidence of student achievement and the enactment of accountability measures (King & Evans 1991, Brady 1996).

<sup>17</sup> Several schools and entire state educational systems launched OBE (e.g. Illinois, Minnesota, Missouri, Kentucky, Michigan, Washington, Pennsylvania), and claims of success and rising test



The popularity of OBE has been explained by the fact that it seems to offer something for everyone, as politicians, businesspeople, community leaders, and educators can relate to exit outcomes, but also because OBE may be effective in coupling control and autonomy (King & Evans 1991)<sup>18</sup>. Nevertheless, widespread opposition to OBE emerged around 1993, and by the end of the 1990s the OBE movement came under criticism for being behaviouristic, mechanistic, and fragmented, and opposition from conservative groups stalled the development of OBE in the United States (Brady 1996, 1997). Spady's direct influence on education in the recent decades has been described as stronger in Australia and South Africa than in the United States, and that many of Spady's ideas have been evident in educational reforms in Scotland and New Zealand (Killen 2000).

#### **Alternative perspectives on learning outcomes**

The outcomes literature also includes several attempts to avoid a limited and reductionist interpretation of the concept. Other labels such as *outcomes of learning* have been put forward to make a distinction from the traditional label of learning outcomes and for the purpose of including all products of learning (Buss 2008:306). Eisner argued for the use of *expressive outcomes*, defined as “outcomes of learning where purposes are formulated in the process of action itself as outcomes becomes emergent and clearer during the learning process” (1979:103). Others suggest using terms with a wider scope, such as *intended outcomes* specified at the beginning of learning, *holistic outcomes* encompassing ways of thinking and practicing which may not be evident until the end of learning or even after it has been completed, and *ancillary or emergent learning outcomes* at a higher level than those specifically related to the main objectives—value-added learning resulting from the learners' ‘own unique journey’ (Buss 2008:307, Entwistle 2005). Another alternative approach has been presented in the work of the U.K.-based Teaching and Learning Research Program (TRLP), which attempted to conceptualise learning outcomes in a broader way than previously, with projects taking account of surface and deep learning, process and product, individual and social, and intended and emergent

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scores are described in the literature (Furman 1994, Capper & Jamieson 1993, Brown 1988, King & Evans 1991).

<sup>18</sup> King & Evans point out that at central level, control can be exerted by setting exit outcomes and simultaneously giving schools the autonomy to achieve these outcomes in the ways they see best. Thus, schools have both the freedom to effect outcomes and the responsibilities for the results (1991).

learning (James & Brown 2005:18). James & Brown suggest that, seen from a social-cultural perspective, traditional measures for assessment miss the point if learning is about becoming a member of the community participating and engaging in norms and social practices, and if the learning outcomes of interest are dynamic, shifting, and sometimes original or unique there is a need for a new methodology for assessment as a contrast to, for example, the science of measurements of mental traits that are assumed to be distinct and relatively stable (2005:19). They suggest assessing learning outcomes drawing on ethnographic and peer-review approaches in social science, appreciation and connoisseurship in the arts, and advocacy, testimony and judgment in law (2005).

This section has illustrated how the literature on learning outcomes displays varied approaches to the concept. It also displays how the concept touches on a great variety of aspects of education, from curriculum development and the organizing of education to teaching and assessment. The thematic area of learning outcomes cannot be reviewed without considering how outcomes are identified (James & Brown 2005). In the following section, the relationship between learning outcomes and assessment—in particular, grading—is presented.

### **Learning outcomes and teachers' grading practices**

The relationship between learning outcomes and assessment is a central part of the discussion of how learning outcomes can be understood (Allan 1996, Eisner 1979, 2005, Spady 1988). In this part of the review, literature on teachers' work with learning outcomes is considered more closely, with a particular focus on grading.

A central element in working with learning outcomes is focusing on clearly defined outcomes of student learning rather than the goals of teaching (Spady 1988, Eisner 2005). However, research indicates that the outcomes of education are often weakly expressed, that assessment is often based on tacit knowledge, and that teachers generally do not communicate learning goals or targets to students without support (Otter 1992, McMillan 2013). Within Norwegian education there are few traditions for working with pre-defined learning outcomes when compared to the Anglo-Saxon tradition (Hatch 2013). The practice of assessing student performance according to predefined goals and standards is relatively new, and a strong tradition of process

orientation has predominated (Engelsen & Smith 2010:417, Hertzberg 2008, Skedsmo 2011, Telhaug et.al 2004). There is an unusual tradition of skepticism towards formal assessment and grading, which has resulted in frequent changes in grading scales and troublesome introductions of new directives (Lysne 2006:330). Evaluations of the Norwegian education reform of 1997 showed that teaching had indistinct performance requirements, teachers were reluctant to define explicit goals of teaching and learning, the choice of learning activities seemed random, and feedback was rare (Haug 2003). Since the evaluation of the reform of 1997, substantial work has been done in Norwegian education emphasising the issue of learning outcomes and assessment (OECD 2011, Aasen et al. 2012, Aasen et al. 2013, Hatch 2013).

### **Teachers' grading practice**

In accordance with the study questions of this thesis, a choice has been made to focus on the issue of teacher's grading practices. This choice was made on the basis of the uses of grades for multiple purposes as indicators of learning outcomes, e.g. as a reference point for the status quo of regional and national education and as a measure for monitoring quality, effectiveness and accountability<sup>19</sup>.

A long line of research has described the difficulties teachers face in establishing valid grading practices (Barnes 1985, Stiggins et. al 1989, Manke and Loyd 1990, Stiggins and Conklin 1992, Brookhart 1994, Brookhart 2013). Studies report that teachers consider factors including attitude, behaviour, effort, motivation, improvement, participation, and assignment completion when grading students (Scneider et al. 2013, Moss 2013). Studies have also shown that teachers utilise an eclectic mix of achievement and non-achievement considerations when grading students in spite of disapproval of this practice among assessment experts and grading regulations (Schneider et al. 2013, Brookhart 1994, Stiggins et al. 1989).

A central study in this body of literature is Brookhart's review article (1994) highlighting individual variation in teachers' grading practices and showing that teachers perceive the meaning and purpose of grades differently (1994:289). The findings indicated that grades mean different things to different teachers, which might

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<sup>19</sup> According to Statistics Norway [www.ssb.no](http://www.ssb.no), the OECD Education at a Glance [www.oecd.org](http://www.oecd.org), and by the National Quality Assurance System (NKVS) on the internet platform "Skoleporten" <http://skoleporten.udir.no/>.

be a threat to the validity of grades. Studies have confirmed this finding, and it has been suggested that teachers' grading practices are based on a different theoretical foundation than theories of regulations for grading and validity anchored in theories of measurement (Barnes 1985, Brookhart 1993, 1994, 2005, 2013, Airasian & Jones 1993). It has been suggested that requirements of grading practices in accordance with theories of measurement may contradict the personal and humanistic project of teachers advocating their students' performance when grading (Bishop 1992, Brookhart 1993). It may also illustrate how central aspects of assessment and grading has been moved out of the hands of teachers into the hands of governments for the sake of standardization (Lundahl & Waldow 2009).

The grounding of recommendations for assessment in theories of scientific measurement has been characterised as a backlash to previous 'rational and positivist perspectives on assessment (Holmstrand 2009) and as an old-fashioned approach that need to be updated by practice grounded in contrasting social-constructivist frameworks with more open-ended assessment and the use of a broader range of assessment tools for the enhancement of student understanding, construction of knowledge, and development of identity (Shepard 2000, James & Brown 2005).

In Norway, a similar approach can be seen in a strengthening of focus on formative assessments in education policy as a response to research reporting potential for improvement of these practices (Tveit 2013). Among other initiatives, a national project of "Improved Assessment Practices" has been launched, drawing on theory and research on formative assessment stating that students learn best when they understand what they are to learn and what is expected of them, when they receive feedback about the quality of their work, when they receive advice on how to improve, and when they are involved in their own learning by self- and peer assessment (Tveit 2013). The Norwegian Directorate of Education and Training expects this initiative in general to have a positive influence on teachers' assessment competence and practice (<http://www.udir.no> retrieved fall 2013).

For a long time, variations in teachers' grading practices have been a concern for assessment experts, who point out that such variation may threaten the reliability and validity of grades, and suggest improvements in teachers' assessment competence as a remedy for the ills identified (Duncan & Noonan 2007, Brookhart 2013). However,

more recent research finds that the primary factor considered in grading is achievement and shows that teachers in different subjects and different grades mix different types of evidence in a logical and reasonable way (Brookhart 2013). Today researchers understand the issues of unreliable or invalid grading decisions in a more nuanced way, realising that grades can have multiple meanings and multiple contexts (Brookhart 2013 Wyatt-Smith & Klenowski 2013). It is suggested that the contexts of grading, such as school subject and different practice sites, should be taken into consideration and that the primary concern should not be to correct practice, but to support the work of teachers in securing reliable and consistent grading (Wyatt-Smith & Klenowski 2013, Brookhart 2013).

### **Grading practices in different school subjects**

Research identifying variation in teachers' grading practices related to school subjects introduces further complexity to the issue of grading (Resh 2009, Duncan & Noonan 2007, Lekholm & Cliffordson 2009, McMillan 2003, Eggen 2004, Wyatt-Smith & Klenowski 2013).

One suggested explanation for this variation is the particular characteristics of school subjects: "The inner structure of a subject matter affects the decision on content to be taught as well as pedagogical patterns implemented in their teaching, including the pattern of students' evaluation" (Resh 2009). Another explanation relates to different epistemological and ideological positions that teachers hold concerning assessment (Eggen 2004:480). Eggen states that the implicit or explicit ideology of each subject influences teachers' view of learning and their attitudes to assessment (2004:479).

Based on comparisons of teachers of English, science and mathematics, it has been suggested that mathematics and science teachers tend to view their subjects as having unique and objectively defined goals, while English teachers employ a range of goals that may be appropriate for a particular student at a particular time (Black et al. 2003:68). These types of teacher-reported judgments identified in English and mathematics classrooms have been described by terms like holistic intuitive, non numerical and drawing on observation and dialog (English) versus rational, analytic, a-historic stated standards and criteria, value free and stable indicators (Math)

underlining the differences in grading practices in different school subjects (Wyatt-Smith & Klenowski 2013).

School subjects may be regarded as the basis by which teachers' construct frameworks for assessing achievement and developing grading practices, and inferences made in assessment are therefore related to the subject domain in question, as well as to other subject domains (Wiliam 1996). As a consequence, processes of validating inferences from and consequences of assessments must be addressed both within and beyond domains (Wiliam 1996). Assessment needs to take into account how subject domains are structured and which methods and processes characterise practice in each field (Harlen 2006:48). The validity of the assessment process is argued to be anchored in the alignment of assessment with learning, teaching, and content knowledge, and the relationship should not be taken for granted (Harlen 2006: 47).

#### **Learning outcomes, knowledge and curriculum content**

The previous discussion on variation in teachers' grading practices in different subjects highlights issues related to the inner structure of subjects, content and knowledge. The debate over what should be taught in schools is certainly not new (Lundgren 2006, Karseth & Sivesind 2010), but it seems to have been accentuated by the introduction of learning outcomes-based approaches in general (Lundgren 2006, Aasen 2013), but in particular by the introduction of qualification frameworks (Young 2009, Young & Muller 2010, Werquine 2012). As this is a huge and complex thematic, this is not a comprehensive review but will merely touch on some of the arguments discussed in literature concerning learning outcomes.

Already in the 1970s it was pointed out that Gagné says little about knowledge and takes the content of curriculum for granted (Ing 1978). On the other hand, proponents of OBE consider the approach to offer a way of education freed from the rigid content of textbooks that opens up a more flexible concept of knowledge, providing an opportunity for all students to learn independent of age and social background (Spady 1989, Jessup 1995).

The last Norwegian education reform of 2006 has been used as an example of a trend in education policy characterised as ‘emptying of content’, denying a distinct ‘voice for knowledge’ in education (Young 2009). The point made is that current developments in education policy lead to a rhetoric in which knowledge is considered a major organising element in education, but with no explicit knowledge important enough to be passed on to the next generation. In this view, students are assessed in terms of outcomes that are not specific in content due to the introduction of generic targets without reference to any specific knowledge or curriculum content (Young 2009). The issue has been studied in Norway, and the question of whether the new approach in curriculum design excludes content and a culture of knowledge in the subject curricula has been raised (Karseth & Sivesind 2010). The findings contradict Young’s argument when it comes to the Norwegian situation, as the analysis shows that both guidelines conceptualise national culture in relation to the past and transfer knowledge as a frame of reference (Karseth & Sivesind 2010). They also point out that current policy reconceptualise the curriculum as a pedagogical tool for learning rather than the framing for what to teach and to learn. This might illustrate how the grammar of schooling (regular structures and rules organising the work of instruction) and the teaching within it are historical products resistant to change (Tyack & Tobin 1994), and that certain ‘fault lines’ continue to influence patterns of disciplinary divisions and difference in education (Muller 2009).

With the theory of the Trichotomy of Outcomes, Eisner first argues that outcomes cannot be predefined, as learning is dependent on three elements: the student, the teacher, and the content. Thus, he recognises the importance of content (1979). As a spokesperson for the importance of assessment and evaluations in art education, Eisner argues that a more complex view considering differing subjects and functions is necessary to stall a press toward a universal ‘one size fits all approach’ in assessment (1996). This uneasy relationship between assessment and subject matter has also been expressed by scholars in mathematics, who claim there is a mismatch between the discipline and school subject and the attention given to assessment in curriculum development in Norway (Gjone 1993). In line with this, it has been argued within the Norwegian context that assessment is the last aspect considered in the processes of planning and introduction of new curricula and education reforms (Lysne

2006). This may illustrate a weak link between characteristic of subjects, its content and assessment.

The results of summative classroom assessment may have great impact on students' prospects, processes of selection, and placement decisions in educational systems (Tierney 2013) as in Norway. On the other hand, the use of grades as indicators of learning outcomes on the national or international scene places grades assigned by teachers far away from the context of the classroom and for other and broader purposes than valuing student achievement at the student level. Due to the uses of summative assessment for multiple purposes, further studies on the meaning and utility of the information provided by grades framed by modern validity theory has been recommended (Tierney 2013, Brookhart 2013).

### **Learning outcomes in policy**

The OBE movement, spearheaded by Spady, is first and foremost described as a philosophy for the emancipation of students that have been ill-served by the system in changing how education is organised (Capper & Jamison 1993). But it has also been described as a model with potential benefits for the governance of systems of education in terms of control and accountability (King & Evans 1991, Capper & Jamison 1993, Spady 1982). As such, the concept of learning outcomes is linked to education concerning issues of teaching and assessment, and also to issues of evaluation and accountability in policy. Nevertheless, the majority of the literature on learning outcomes focus on questions of pedagogy and conceptual and empirical aspects of the uses of learning outcomes in teaching, learning, and assessment, while there are few studies at the aggregate level of policies and governance (Lassnigg 2012:303).

The introduction of this thesis brought attention to several initiatives made by international organisations emphasising learning outcomes in education. Rationales for the introduction of learning outcomes at policy level have been presented by the OECD, AEHA and the EU: to enable comparison (Nusche 2008), to establish more transparent systems of education and qualifications (EU 2011, Adam 2004), and because learning outcomes are at the forefront of educational change, to focus on a student-centered approach rather than a teacher-centered approach (Adam 2004). The



influence of international organisations on educational reform, particularly the OECD and the PISA studies, have been thoroughly investigated and are reported to have been effective in influencing national policies in a number of countries (Hopmann 2008, Ozga et al. 2011, Pettersson 2008, 2012, Mausethagen 2013). These organisations can be characterised as having an influence on member countries through agreements and commitments to follow regulations as within the EU, but also through processes that are not regulatory but advisory, which the OECD characterised as soft governance (Mausethagen 2013). The PISA studies of the OECD illustrate how national policies are influenced by soft governing through numbers and benchmarking but also through concepts (Mausethagen 2013). It has been shown how concepts like competence (Mausethagen 2013), knowledge (Young 2009) and certain narratives (Pettersson 2008, 2012) become a central part of the rhetoric of initiatives taken at the international level, and that these concepts have been taken for granted and seldom questioned at the national level—issues raised often focus on whether or how initiatives can be acted upon. This may also be the case with the concept of learning outcomes. In the identified literature there are few conceptual discussions on learning outcomes within the frame of education policy, but there have been several discussions about the concept in relation to a diversity of policy initiatives such as the PISA studies and the introduction of EQF and NQF.

The European discussion on learning outcomes has been characterised as younger than the American discussion (Lassnigg 2011) and mainly related to the implementation of the European Qualifications Framework (EQF) and, subsequently, the National Qualification Frameworks (NQF). The discussion seems to have evolved from the works on qualification frameworks in the United Kingdom in the 1980s based on concerns for the competence of the future workforce (Young 2003, Melton 1996, Burke 1995, Jessup 1991). This development has been described as a gradual evolution of the way standards are expressed in terms of competences for vocational purposes, extending standard-setting in terms of learning outcomes for both educational and vocational purposes with implications for higher education and training (Melton 1996).

The development of qualification frameworks is considered to be a major new policy device in governing education and training, characterised as a policy discourse

disguising learning outcomes in more overt policies entailing the development of National Qualification Frameworks and the European Qualification Framework, and an emphasis on ‘outcome orientation’ in the European work programme for education and training after the Lisbon Summit in 2000, the Bologna Process and the Copenhagen Process (Lassnigg 2011). Nevertheless, although this policy is seen as promising as a powerful lever for change, little faith is placed on its success as it is argued that the new policy holds unwarranted exaggerations of good ideas from a micro level to a systemic or aggregate level (Lassnigg 2011). This critique of applying learning outcomes at a systemic level and thereby introducing ‘good’ ideas made for the school level as good ideas for the system as a whole has been critiqued by Hussey and Smith, who write: “...[T]he further away from students and the teacher in a classroom, the more remote, generalized and irrelevant statements of learning outcomes become” (Hussey & Smith 2008:114).

The process of governing education today is challenged by increasingly complex education systems due to the growing diversity of stakeholders, a greater demand on education systems, more decentralised governance<sup>20</sup> structures, an increased importance of additional layers of governance at the international and transnational levels, and rapidly changing and spreading information and communication technologies (ICTs) (Fazekas & Burns 2012). Furthermore, it has been argued that rapid changes in information and knowledge challenge governmental central steering, as it becomes difficult to regulate the content of education from the central political level; this apparent trend is linked to calls for a more learning outcome-oriented approach. Instead of defining content, it is suggested that national curricula be based on how knowledge is structured and articulated in concepts, theories, models, competencies, and skills, expressed in terms of goals and expected learning outcomes (Aasen 2012, Lundgren 2006).

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<sup>20</sup> Fazekas and Burns (2012) use the terms ‘governing’ and ‘governance’ interchangeably. I have chosen to refer to them without interfering with their ways of using the terms. In this study, I have chosen not to wade into the complexities of the term ‘governance’, but to apply the term ‘governing’ as a general term for ‘the conduct of policy, actions and affairs of a state, organisation, or people with authority’ (English Dictionary), as the issue of governing vs. governance is not within the scope of the thesis.

The complexities of governing in education leads to a growing need for governance structures, which can provide actors with the knowledge they need to make decisions (Fazekas & Burns 2012). Governance processes and knowledge are seen as mutually constitutive, as governance is not conceivable without a minimum degree of knowledge, given that collective action is impossible without agreement on some of the basic ideas by some of the actors, and creating and sustaining policy-relevant knowledge cannot happen without some governance structure in place; shared understanding is unlikely to be sustainable without recurring acts of governance (Faztekas & Burns 2012).

Looking at how knowledge feeds directly into governance, Fazekas and Burns (2012) identify four critical resources: problem definition, identification of policy solutions, deriving feedback, and policy implementation. They illustrate this by referring to the PISA studies and how problem definition and identification have gone through a significant shift in OECD countries as problems and challenges of national education systems are increasingly recognised as being conveyed by international organisations such as the OECD or the EU and defined in terms of quantitative data (Ozga et al. 2011).

The growing use of data has been criticised for encouraging a focus on the use of indicators as a ‘new calculative rationality (Bauman 1992) of modern governance’ (Lawn 2011:278). It has also been described as a ‘quick language’ of standardised testing, which reduces the complexities of the field to make educational matters accessible for a wider discourse, introducing a language that appears modern and rational, and providing operational and functional aspects on an administrative level for the change of education systems (Lundahl & Waldow 2013). It is also claimed that relying on this ‘quick language’ in planning and organising education leads to a less dynamic educational system (Lundahl & Waldow 2013), leading to both intended and unintended effects (Lawn 2011).

Governing by data and ‘quick language’ may be an efficient way to obtain a snapshot of information at the central state level for identification of problem areas, quality assurance or accountability, but the same information might not be helpful to those responsible for education locally. To govern by goals requires clear goals balanced

with space for local and professional interpretation (Aasen 2012). An implementation study of the Norwegian reform of 2006 showed how the reform was highly attuned to providing information on learning outcomes for governing of the system at the central state level, while local authorities, school leaders and teachers reported difficulties in applying the same information at their levels of the system as intended (Aasen et al. 2012, Møller et al. 2010). This indicates a need for differentiated learning outcomes information adjusted to the needs of the different levels of educational systems; in other words, governing education systems presumably requires another type of learning outcomes information than the steering of local activities for learning.

The issue of learning outcomes in national policy is often portrayed as driven by international initiatives, but it has also been argued that it is shaped by national policy through different constitutional mindsets which have a strong impact on how the public and institutions conceptualise the legal and structural implications of social change (Hopmann 2008). This can be seen in the way in which Norway has introduced a learning outcomes-oriented approach in education characterised as a halfway move towards accountability, without introducing traditional follow-up mechanisms of high-stakes incentives and rewards characteristic of accountability policies in other countries (Hatch 2013). Instead, the Norwegian approach has been to try to find a compromise between two aspects of accountability: answerability for the achievement of goals and responsibility for attainment of broader purposes (Hatch 2013). This approach is thought to have little prospect of success in terms of improved results on international tests, but may contribute to capacity-building in support of the fulfillment of broader purposes (Hatch 2013). When viewed from an international perspective, Norway has continued the policies often characterised in reference to the Nordic model which is "...based on cooperation and compromise, with a special balance between the state, the market, and civil society" (Telhaug et al. 2006:278), and with a public comprehensive education system founded around principles of standardisation, universalization, and social inclusion (Aasen et al. 2013). This traditional Norwegian education policy has faced challenges from the changing global economy, secularisation, growing relativism, and multicultural pluralism (Aasen et al. 2013, Telhaug et al. 2006, Aasen 2013).

The context of policymakers may seem to influence how the concept of learning outcomes is understood nationally and locally. Hargreaves and Moore argue that in a context of socialist policy making, the technical-rational logic of learning outcomes can be overthrown successfully (2000). They also make a call for the accumulation of more evidence on outcomes across different contexts to enable the development of a meta-analysis of outcomes and their effects under different policy orientations, with the ultimate goal of identifying degrees of central control over specification of outcomes.

### **Summary**

The review has identified a substantial international knowledge base on the concept of learning outcomes. It has shown that there is a tradition of discussing learning outcomes in the United States and in the United Kingdom, in contrast to the limited discussions on this topic in Norwegian research.

It has also identified that most literature on learning outcomes discusses issues concerning teaching, learning, and assessment, while few studies discuss issues related to learning outcomes conceptually in terms of policy and governing. The issues of learning outcomes and governing are more often discussed in literature published by international organisations such as the OECD and EU. The framing of the concepts in these publications seems to be more harmonious than the debates emerging within the research literature. It is pointed out that learning outcomes should be investigated more thoroughly as well as related to contextual dimensions and the culture of policy, as these that may shape how the concept of learning outcomes is played out in real life (Hargreaves & Moore 2000).

The body of literature presented on teachers' grading practices illustrates key issues of scholarly debate around variation and consistency, continuing over several decades. While few studies on grading related to characteristics of subject knowledge and content have been identified, prominent researchers in assessment suggest that a change in focus has taken place, leading to greater recognition of grading as having multiple meanings and multiple contexts. The literature also illustrates how inconsistency between grading theory and practice is still an issue of concern when it comes to the fairness and validity of grades, and more research on these is called for. The identified literature does not discuss these issues in light of multiple uses of

grades when used as indicators of learning outcomes at the national or international level.

In general most of the studies identified in this review are analytical, conceptual, or philosophical. Some are described as working papers and discussion papers. Few works identified in this review are empirical.

None of the studies in the review have conducted explorative investigations into how actors in education conceptualise learning outcomes and how different actors in education understand the concept; these issues seem to be taken for granted.

Based on these points from the review, I argue that an empirical study of how the concept of learning outcomes is conceptualised by three different groups of actors in education can make an important contribution to the knowledge base on learning outcomes. By including the perspective of international scholars, Norwegian teachers, and Norwegian policymakers, the study can help illuminate how the concept is conceptualised in Norway, but also how different actors in education conceptualise learning outcomes within the framing context of education policy.

## Chapter 3: Conceptual, theoretical and analytical framework of the study

In this chapter, the conceptual, theoretical, and analytical framework is presented in three sections. In the first section, the study question is presented and central elements and demarcation lines are introduced. In the second section, theoretical contributions that form the overarching approach and the analytical framework are discussed and explained. In the third section, the analytical framework for the investigation is presented as a model.

### Introduction – preparing and delimiting the conceptual analysis

As the study question of this study is what guides the choice of theory (and method) it is important to keep the overarching study question in mind:

*How is the concept of learning outcomes conceptualised in theory and practice by different actors in different educational contexts?*

The study question makes it clear that this is a study of a concept. Using the terms ‘concept’ and ‘conceptualisation’ is not as straightforward as it may seem (Margolis & Laurence 2012). Therefore, there is a need to clarify what is understood by these terms as they are used in this project. As language is important for this investigation, I borrow concepts and theory from the field of philosophy of language.

The term *concept* is considered to refer to constituents of thoughts, crucial processes of categorisation, inference, memory, learning, and decision-making (Margolis and Laurence 2012:1)<sup>21</sup>. *Concept* is used to label the subject of study to signify that *learning outcome* is understood as something more than a merely definitional term. It implies an understanding of the phenomenon of learning outcomes as a speech act representing a way of thinking, an attitude, and a perspective situated in the contextual environment of those using it.

*Conceptualisation* is used as a label to signify the processes of giving the subject of study meaning, as it is expressed through language. Further, *to conceptualise* is

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<sup>21</sup> The term concept is contested within the field of philosophy; however these matters will not be discussed as they are outside the scope of the thesis.

considered to include both what a learning outcome is considered to be (what it is) and its purpose (what it is for) as understood by actors in education. These issues will be discussed more thoroughly in the following sections.

To conduct a conceptual analysis of the concept of learning outcomes involves studying something not directly observable, as opposed to a phenomenon that is directly observable through our senses. Its existence, usage, and meaning are grounded in human reflection and theoretical analysis expressed by language. To observe and identify characteristics of the concept of learning outcomes involves studying how it is used in language and how it constructs meaning. When looking for meaning in ‘what is’ questions Green (2009:3) points out that ‘given the dizzying array of uses of meaning in philosophy and related cognitive sciences...’, it can be helpful to consider the elements of content and force of the speech acts that people make. The primary question of this study is posed as a ‘how’ question and not as a ‘what is’ question. This choice has been made based on an assumption that different actors in different contexts may use the concept of learning outcomes differently and that searching for answers to how it is used may be a more fruitful approach than looking for ‘an essentialist, once and for all definition’ (Wittek & Kvernbekk 2011:682). By using a ‘how’ question, the contextual environment of language in use is recognized to a greater extent than when a ‘what is’ question is posed. This allows for placing the ‘what is learning outcomes-question’ in the second place in an approach aligned with a theoretical framework influenced by Searle (1995) (this is further described in the next section).

As I consider the meaning of the concept of learning outcomes to reside in both how it is defined by content and in how it is used in language, I have chosen a theoretical framework inspired by theory of speech acts (Austin 1962). Austin claimed that language permits people to do things with words that exceed simply describing reality. According to Austin, sentences not only passively describe a given reality, but can also change the reality they are describing as performative utterances, or performatives (1962).

Austin distinguished between what an expression *means* and what it *does* by presenting three ways of performing speech acts: the locutionary act, the illocutionary



act and the perlocutionary act. The first is an action of saying, and by that making the actual sounds that in a language constitute words. This is interpreted as the basic meaning of the word (Heraldstveit og Bjørgo 1992:61). The second act represents what we are doing in saying something; Austin calls this the “force of utterance” (1962), and Heraldstveit & Bjørgo (1992:61) illustrate it with the examples of making a promise, giving a command or simply asking something. The third speech act represents what happens with what is expressed, ‘what we bring about or achieve by saying something’ (Austin 1962). Bjørgo & Heraldstveit (1992:62) highlight examples of this last act such as convincing, persuading, and even misleading. With a speech act, we can do something in two ways: what the sender does with a statement, and what the statement does with the receiver. This distinction is important for this study, as it is an investigation focusing on what the sender of a message does, thus focusing on the first two speech acts described by Austin, the locutionary and the illocutionary. The perlocutionary speech acts is beyond the scope of this investigation and is not discussed further.

As this study aims to identify how actors in education conceptualise the concept of learning outcomes, there is a need for a theory that can describe how the content and usage can occur and be considered meaningful in different contexts; for this, I need a foundational theory of meaning (Green 2009).

The theory of speech acts developed by Austin was further developed by John R. Searle (1995, 2005), and it is Searle’s theory on the construction of social reality which provides a foundational theory for this project. In the following section, the elements of the overarching theoretical foundation of this thesis are presented and discussed in more detail. Before this, some arguments are set out for the use of the theories on speech acts provided by Searle in the book *The Construction of Social Reality* (1995) and in his article “What Is an Institution?” (2005), as it is not immediately evident that his theories fit the complexities of the field of education.

### **Moving towards a theoretical and analytical framework**

In this thesis, I have chosen to make use of the ideas of Searle within the field of education. There are several arguments underpinning this choice. Searle’s central project is to analyse ‘the role of language in the constitution of institutions’, as

presented in his book *The Construction of Social Reality* (1995) and the article “What Is an Institution?” (2005); this is central to the theoretical approach of this study and the development of the analytical framework.

#### **An argument for the choice of theory**

Searle (1995, 2005:2) claims that researchers in social science have taken language for granted and have thus overlooked the very building blocks that constitute social reality. Searle argues that ‘Instead of presupposing language and analysing institutions, we have to analyse the role of language in the constitution of institutions’ (2005:2). He suggests that a sound way to do this is not to go directly at the ‘what is’ questions, but to start with statements reporting institutional facts and to analyse the nature of these in terms of the ways in which they differ from other sorts of facts, an approach which may lead to answering the initial ‘what is’ question (Searle 2005:2).

Searle’s main question is ‘How do we construct an objective social reality?’ (1995) and ‘How can there...be an epistemically objective institutional reality of money, government, property and so on, given that this is in part constituted by subjective feelings and attitudes, thus, has a subjective ontology?’ (Searle 2005:5).

Searle underscores that he is not making an attempt to describe what he calls ‘...massive forms of human practices around certain subject matters that do not as such carry a deontology, even though there are lots of deontologies within the practices’ (2005:19). He points in the direction of science, religion, and education and questions whether these are institutions. He also underscores that he thinks that it is important to avoid confusing these with things such as money, property, government, and marriage even though there are institutions and plenty of institutional facts within these practices. His main point for naming something an institution is that it is required to carry so-called deontic powers (expressing duty or right). He provides a four-point test for making judgments on whether something (W) can be considered an institution (Searle 2005:x):

1. Is W defined by a set of constitutive rules?
2. Do those rules determine status functions, which are in fact collectively recognized and accepted?

3. Are those status functions only performable in virtue of the collective recognition and acceptance and not in virtue of the observer independent features of the situation alone?
4. Do the status functions carry recognized and accepted deontic powers?

To study the concept of learning outcomes is primarily a study of a concept and how it is used in language; at first glimpse there does not seem to be anything institution-like to talk about. But in line with Searle, I do think that the field of education needs to consider how its institutions come about, especially those designed for identification and validation of learning and performance.

Here I will make an argument for considering learning outcomes as an institution in a ‘Searlian’ way, making use of the four-point test presented above:

- 1) The concept of learning outcomes is constituted by a set of rules provided by procedures and practices for identification of student learning and performance, e.g. in teachers’ grading, in national qualifications frameworks, or in testing of student performance such as the PISA.
- 2) These rules determine the status functions of the concept of learning outcomes, for example, how learning outcomes define what is appreciated as valuable learning in society.
- 3) This status is only performable because it is collectively recognized and accepted, and would not be without it.
- 4) The status functions of the concept of learning outcomes carry deontic powers such as enabling separation between good and bad performers, recognition of performance for the purpose of selection and placement decisions with strong implications for the future life of students and in benchmarking between nations, possibly leading to policy development and change.

The test illustrates that learning outcomes can be considered an institution when stretching the requirements of the test. It is necessary to recognise the differences pointed out by Searle between educational concepts like learning outcomes and things like money or government, the latter being more of a definitive institution than the former. When that is said, Searle also points out that ‘institution’ is used as a technical

term and that it is open to us if we want to call the practices of for example education institutions (2005:19).

On this basis, I will argue that Searle's ideas on speech acts and the creation of institutional facts can provide appropriate and incisive tools to be used as an inspiration for the analysis in this thesis. I will not claim that I am *using* the theories of Searle in this study; rather, I am borrowing ideas, and the theoretical framework of the study is inspired by his theory on the construction of social reality. Thus, the concept of learning outcomes is considered an institutional fact dependent on a collective such as a university, a community, or a national educational system, and statements and speech acts concerning learning outcomes are considered to have a constitutive role when it comes to what is considered as real and true about the concept.

### **Construction of social reality**

In Searle's project, there is a defence of the idea of a reality independent of us as opposed to the idea that all of reality is a human creation (1995)<sup>22</sup>. As Searle sees it, there are objective facts in the world that are only facts because we believe them to exist, and he calls some of these facts 'institutional facts' (e.g. money, marriage) as opposed to non-institutional facts or 'brute facts' (e.g. mountains, trees) (Searle 1995: 2). The creation of institutional facts is enabled by collectively accepted systems of rules (procedures, practices). Searle describes the rules in these systems as having 'the form of X counts as Y in C, where an object, person or state of affairs X is assigned a special status, the Y status, such that the new status enables a person or object to perform functions that it could not perform solely in virtue of its physical structure, but requires as a necessary condition, the assignment of the status' (1995:22). According to Searle (1995:14), members of a collective impose a certain status on a phenomenon as an institutional fact, which also gives the phenomenon a certain function through agreement and acceptance. The collective assignment of status and function also involves recognition of something or someone having power by virtue of their institutional status. The creation of an institutional fact requires a

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<sup>22</sup> Searle also mounts a defence of the correspondence theory of truth. Searle opposes the traditional distinction between mind and body and between nature and culture and prefers a perspective in which the mind is a set of higher-level features of the brain that are mental and physical at once (1995).

collective recognition and acceptance of so-called deontic powers, e.g. rights, duties, responsibilities, and obligations. Searle exemplifies this with the need to satisfy certain conditions to become the president of the United States, and when a person has become the president he or she requires the people of the United States to accept his or her powers to do certain things.

A relevant example for this study is how teachers are obliged to assign grades to students and how students, parents, employers, and educational institutions recognise and accept grades assigned by teachers as a kind of ‘currency’ in the labour market or as a device for screening and selection. In a situation where the members of a collective do not agree upon and accept the status and function, the phenomenon in question (either as a new phenomenon or as continued acceptance of a phenomenon) ceases to exist.

This study investigates three groups of actors in education and their conceptualisations of the concept of learning outcomes (X) and what they consider learning outcomes to ‘count as’ (Y) within their particular context (C). The logic rule of Searle provides a tool for identifying what the concept counts as (as the collectively assigned status function) when used in language by actors in different contexts.

**Table 1: Logic rule**

X	count as Y	In C
Learning outcomes	collectively assigned status function	within the context of education (expressed by scholars, teachers, and policymakers)

Searle has been criticised for failing to provide sufficient explanations for central elements of his theory on speech acts, such as his notion of *collective intentionality*<sup>23</sup>,

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<sup>23</sup> Defined as a ‘primitive concept which does not reduce to individual intentionality plus mutual knowledge’ (Searle et al. 1992:138).

*the background*<sup>24</sup> and his considerations on conversation and speech acts<sup>25</sup> (Searle et al. 1992). These criticisms typically emerge in complex and specialised debates arising within the fields of philosophy of language, discourse and linguistics; as such they are beyond the scope of this study.

The focus of this study is limited to the theories Searle describes in *The construction of Social Reality* (1995) and *What is an Institution?* (2005). These sources provided inspiration for the development of the analytical framework used in this study. The study does not aspire to use Searle's theory of speech acts for the purpose of language/linguistic analysis, but to apply the analytical framework for the identification and exploration of statements concerning learning outcomes.

### **Theoretical and analytical framework**

Speech act theory provides an analytical tool for identification of what the key concept is considered to “count as” (Searle 1995, 2005), as expressed by three groups of actors in education. To enable further exploration and discussion of the identified key concept in relation to the thematic field of education, the analytical framework has been enriched by supplementing it with theoretical contributions on learning outcomes (Eisner 1979, 2005, Gagné 1974). Robert Gagné (1974) and Elliot Eisner (1979) have each made key contributions to the discussion of learning outcomes. According to Gagné, a learning outcome ‘makes possible a refined understanding of the learning process and thus permits a drawing of relatively precise implications for the design of instruction’ (1974:51). Eisner writes that learning outcomes are ‘essentially what one ends up with, intended or not, after some form of engagement’ (1979:101). Gagné is recognised as a behaviourist (Burke 1995), while Eisner is considered a pragmatist and social constructivist (Allan 1996). Hence, Gagné and Eisner represent two different perspectives on learning that are accompanied by different perspectives on the outcomes of learning (see Chapter 2 for further discussion).

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<sup>24</sup> Defined as ‘sets of preintentional capacities that enable all meaning and understanding to take place’ (Searle et al. 1992:145)

<sup>25</sup> His considerations on the debate on conversation and speech acts contain several arguments among other things he argues that “There is no *additional* level of meaning that goes with the conversation as opposed to the meaning of the individual speech acts” (Searle et al. 1992:147)

The theories on learning outcomes provide tools for further identification and analysis of the positioning of the key concept made by the groups of actors in relation to education as a thematic field. The concept of learning outcomes is evidently linked to the concept of learning, and by bringing in theories from the field of education, perspectives on learning are also brought into the framework.

The theories of learning outcomes recognised in the literature review provide the framework with two pairs of dichotomies: one for the identification of ‘what the key concept of learning outcomes is considered to be’ (definitional content), and another for the identification of ‘what the key concept is considered to be for’ (purpose) by the actors studied.

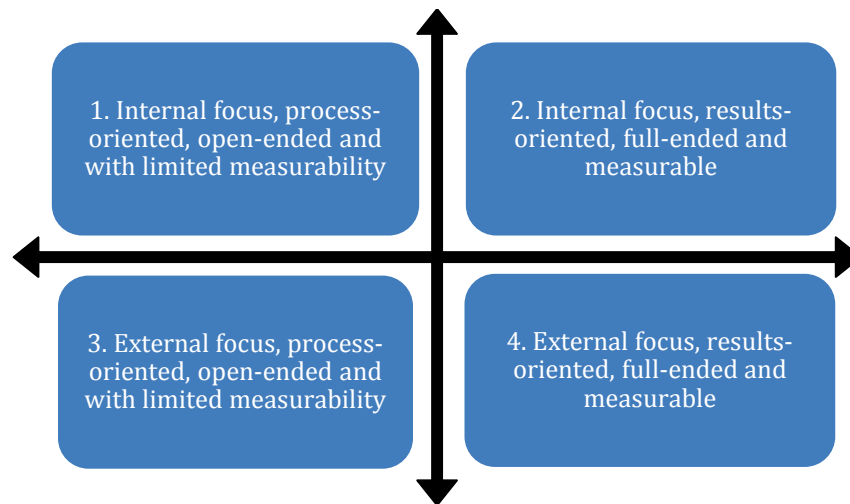
Definitional approaches to the key concept can be viewed as two opposite poles of a continuum in which learning outcomes are characterised as either process-oriented, open-ended, and with limited measurability (in keeping with Eisner) or result-oriented, full-ended, and measurable (in keeping with Gagné).

The usage of the term ‘learning outcome’ as expressed in the outcomes literature indicates that there are different conceptions of the purpose of learning outcomes, as either a tool for educational and instructional planning and curriculum development (internal focus), or as a tool for measuring effectiveness and accountability<sup>26</sup> (external focus). These approaches to purpose can also be viewed as two opposite poles of a continuum. Thus, the analytical tool consists of combining these two continuums to create four quadrants, each representing different conceptualisations of learning outcomes (see Fig. 1<sup>27</sup>).

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<sup>26</sup> The term ‘accountability’ comprises political accountability, legal accountability, bureaucratic accountability, professional accountability, and market accountability (Darling-Hammond 2004).

<sup>27</sup> Since the first study (Prøitz 2010:123) the labels used for describing the characteristics of the four quadrants has been developed, resulting in the analytical tool presented here.



**Figure 1: Analytical framework**

The model provides a matrix with four quadrants of combinations of learning outcome characteristics, which provides a starting point for this investigation of how learning outcome is conceptualised by actors in education.

The analytical framework is an important part of the study, initially developed as a theory-grounded platform for the study as a whole. The framework was further confirmed as useful and strengthened by the empirical findings of the first case study (Prøitz 2010), leading towards the use of the framework throughout the study and further tested and developed by the empirical findings of the next two studies (Prøitz 2013a, Prøitz 2013b).



## **Chapter 4: Methodological approach**

### **Introduction**

The research design of this thesis can be characterised as a case study. It is grounded in an epistemological orientation categorised as interpretive (Gall et al. 1996, Cohen et al. 2011). There are several key sources in the literature describing how to conduct case studies (Cohen et al. 2011). The work of Yin (1994) has been chosen as the main inspiration and source for how to proceed with the case study design; other sources for supplementing the work of Yin are also drawn upon in the design.

The purpose of applying a case-study approach is to shed light on a phenomenon through the study of a particular instance of that phenomenon (Gall et al. 1996). The phenomenon studied in this thesis is the concept of learning outcomes, and the particular instances studied are how it is conceptualised by different groups of actors in education. The study aims to illuminate the phenomenon of learning outcomes as conceptualised by scholars, as conceptualised through teachers' descriptions of their own practice of grading, and finally as conceptualised by policymakers in official policy documents. Three sources of data material have been explored in three separate studies, each of them reported in one of the papers.

The study questions of this Ph.D. project establish a search for answers to 'how questions', meaning that the investigators' control of events surrounding the issue in question is negligible; this combined with the fact that the project aims at studying the concept of learning outcome as a contemporary phenomenon points in the direction of a case study approach (Yin 1994). The case study has been chosen because of its ability to deal with a full variety of evidence (Yin 1994: 4-8)—in this case, data and material from different types of documents and interviews. Another relevant characteristic of the case-study approach is that its aim is not to make generalisations about a population but to develop theoretical propositions. The case study does not represent a population or a universe, but aims to expand and generalise theories, hence analytical generalisations (Yin 1994: 10, Flyvbjerg 2011: 305). Applying a case-study approach is a deliberate choice when contextual conditions are considered important, and this is especially important when the boundaries between phenomenon and context are not clearly evident in real life. As the case-study approach deals with

a wide variety of evidence, this allows it to address a broader range of historical, attitudinal and behavioural issues (Yin 1994:92).

This study is a multiple-case design (Yin 1994). Evidence based on a multiple case design is often considered more robust, but cannot satisfy the rationales for single case designs whereby they are defined as the unusual, the critical or the revelatory case (Yin 1994). The distinction between single-case and multiple-case design confirms the choice of a multiple-case design as the appropriate approach for the aims of the study: to conduct an explorative investigation into the conceptualisation of learning outcomes looking for the typical and general more than searching for the special and unique. In accordance with Yin (1994), each case of this multiple-case study has been chosen to serve the specific purpose of the overall scope of the investigation.

### **Five components of the chosen research design**

In the following section the chosen research design is described following five components that are emphasised by Yin as especially important (1994:20), starting with the study question, study propositions and units of analysis followed by the logic linking the data and propositions and finally the criteria for interpreting findings.

#### **Study questions**

The purpose of the study is to explore how the concept of learning outcomes is conceptualised in education by different actors in different contexts, and to develop theoretical propositions leading to a heuristic devise for enabling an enlightened understanding of the concept of learning outcomes. The overarching study question has been defined as follows:

*How is the concept of learning outcomes conceptualised in theory and practice by different actors in different educational contexts?*

The study question is descriptive and exploratory. The thematic focus of the study is to answer the study question by synthesizing the results of three empirical studies and drawing cross-case conclusions. To answer the overarching study question, further study questions for the three individual studies have been specified:

Study 1: *How is the term 'learning outcome' defined? By whom? When? Where?*

Study 2: *How do teachers approach grading in different school subjects? How do the grading practices in different subjects correspond to recommendations and regulations for grading? What are the implications for the validity of indicators of learning outcomes based on student's grades?*

Study 3: *How are learning outcomes conceptualised in policy documents? To what extent and in which ways is the concept of learning outcomes used?*

### **Study propositions**

Study propositions direct attention to what should be examined within the scope of the study and provide a reference point for linking between the propositions and data (Yin 1994:21). The focus of this thesis is to explore the concept of learning outcomes guided by a proposition made by Adam (2004:19) that there is a commonly shared and broadly defined understanding of learning outcomes. However, he also underscores that it is not safe to assume a common understanding of the practical application of the concept in the different countries studied (2004:19). In this way, Adam's proposition emphasises two fundamental issues concerning the concept of learning outcomes in education: 1) that there is a commonly shared and broadly defined understanding of the concept and 2) that there might be different understandings in the practical application of the concept.

### **Units of analysis**

Gall et al. (1996:546) define the unit of analysis as an aspect of the phenomenon studied that can be sampled, where each sample represents a separate case. The unit of analysis is what constitutes the case and should be clear from the study question (Yin 1994:22).

Flyvbjerg (2011:301) underscores the importance of drawing boundaries for the individual unit of study, which determines what counts as a case and what becomes the context to the case. The unit of analysis in this investigation is the conceptualisation of learning outcomes, and its boundaries are defined by the three individual cases of how actors in education conceptualise learning outcomes in their particular context. The case study is framed by the study questions, one common theoretical platform and a mainly qualitative methodological approach.

### **Linking data to propositions**

Multiple cases should be based on replication logic, either as literal replication or as theoretical replication; the former studies two or more cases predicting the same results, while the latter expects differing results for different cases in accordance with theoretical propositions (Yin 1994). Following the two propositions of Adam (1994) (see study propositions above) grounding for an explorative approach of literal 1) and theoretical 2) replication has been provided.

However it must be underscored that the design of the case study cannot be considered to be a multiple case study with clear propositions and strict replication logic, as it is an exploratory study. Yin points out that exploratory studies have legitimate reason for not having propositions, but that a purpose for the study should be stated (1994:21) (see purpose of study under Study questions above). Gall et al. (1996:553) point out that replication logic is seldom used, despite its usefulness in testing theoretical propositions. In this study of exploring the concept of learning outcomes, the propositions made by Adam are not tested through replication in a strict sense. The propositions have instead been chosen as guiding landmarks for the explorative study of how learning outcomes are conceptualised in education. Yin's replication logic is used to encourage a focused methodological approach while handling complex and rich data.

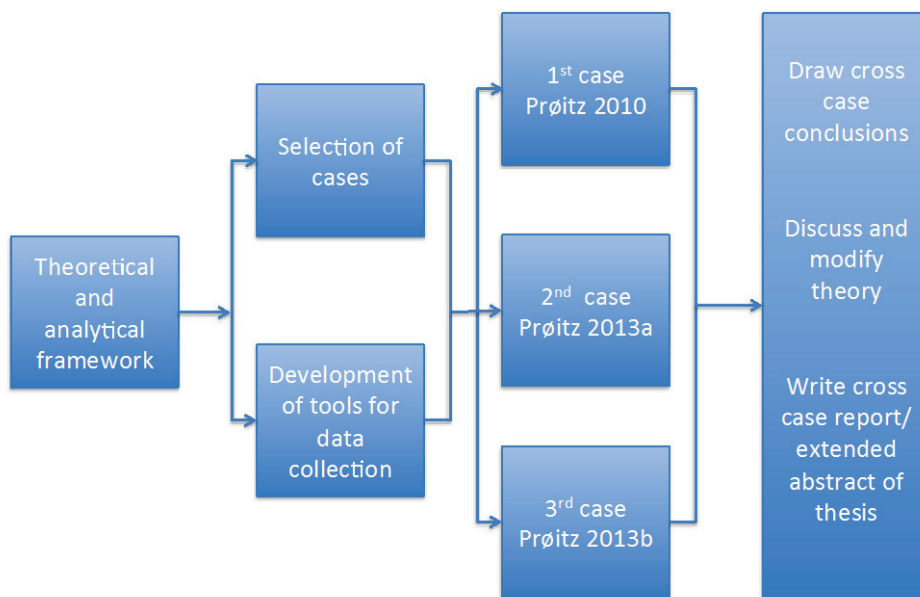
### **Criteria for interpreting the findings**

There is no precise way of setting criteria for the interpretation of results, but there is an assumption (or aspiration) that the patterns identified are differentiated enough to be sorted into at least two rival propositions (Yin 1994). The explorative purpose of this study requires an open and curious approach, and defining criteria for the interpretation of findings in advance seems likely to limit the ambition and potential for identifying conceptualisations of the concept of learning outcomes. Instead, a theoretical and analytical framework developed at the initial stage and during the process of the case study is used, together with the purpose and study question, to form a basis for interpretation of the results of the study.

### **The case study method**

The case study method has been described as a process of three steps: define and design; prepare, collect, and analyse; and finally, analyse and conclude (Yin 1994:49).

Yin underlines that the initial step in the design of the case study is theory development and that the next steps are the selection of cases and the definition of specific measures for data collection. Each of the individual cases is a whole study, in which evidence is sought to identify conclusions for the case study. The conclusions of each of the cases are considered by Yin to be the information that needs replication of other individual cases (1994:49). Conducting a multiple-case study requires writing an individual case report for each of the cases as well as a cross-case report to document the case study (Yin 1994). In this thesis, the individual case report and the cross-case report are considered to be equivalent, with the three articles reporting on the individual studies and the extended abstract reporting on the case study as a whole. The following figure illustrates the case study method inspired by Yin, tailored to the case study of this thesis.



**Figure 2: The methodological process**

For the purpose of conducting an explorative investigation, collecting rich data and material to provide a broad picture has been prioritised. The methods applied have been chosen for the purpose of providing rich and purposeful data to suit the study question optimally. Three different methods have been used in each of the cases: review/document analysis, interviews, and content/document analysis. For the same

reason, a choice was made to let the cases cover three different points of time: conceptualisations by scholars during a period from 1974 to 2008, teachers' conceptualisations at one point in time (spring 2010), and policymakers' conceptualisations during a period from 1997 to 2011. The three cases can be characterised respectively as an explorative case of review/document analysis (Prøitz 2010), an exemplary case (Prøitz 2013a), and, finally, an exploratory case of content/document analysis. In the following table, an overview of the study questions, methods, data material and unit of analysis is presented (Table 2).

**Table 2: Overview: study questions, methodological approach, data material, unit of analysis**

<b>Overarching study question:</b> <i>How is the concept of learning outcomes conceptualised in theory and practice by different actors in different educational contexts?</i>				<b>Overarching unit of analysis:</b> Conceptualisation of the concept of learning outcomes in education
	<b>Study questions</b>	<b>Methodological approach</b>	<b>Data material</b>	<b>Unit of analysis</b>
1	<i>-How is the term "learning outcome" defined? -By whom? -When? Where? (Prøitz 2010)</i>	Qualitative review/document analysis	33 written scholarly publications	Conceptualisation of the concept of learning outcomes made by scholars in scholarly written documents discussing the concept of learning outcomes.
2	<i>-How do teachers' approach grading in different school subjects? -How do the grading practices in the different subjects correspond to the recommendations and regulations for grading? -What are the implications for the validity of indicators of learning outcomes based on student's grades? (Prøitz 2013a)</i>	Qualitative interviews	41 audio-recorded with teachers, transcribed word-for-word	Conceptualisation of the concept of learning outcomes made by teachers when describing their own grading practices.
3	<i>-How are learning outcomes conceptualised in policy documents? -To what extent and in which ways is the concept of learning outcomes used? (Prøitz 2013b)</i>	Content analysis qualitative document analysis	The Norwegian national budget over the period from 1997 to 2011	Conceptualisation of the concept of learning outcomes made by policymakers in policy documents.

The framework that unites the cases is a common theoretical and analytical framework for the case study as a whole: shared theoretical propositions, the study question for the overall case study, and a common set of units of analysis.

### **Selection of documents and informants**

The documents and informants in this case study have been selected based on the idea that they are key documents and informants, which can be expected to offer in-depth information on the subject in question. This selection strategy may be classified as information-oriented (Flyvbjerg 2011: 307) and purposeful sampling (Gall et.al 1996). Guided by the overarching study question, three groups of actors in education were identified as interesting and relevant: scholars in education, teachers, and policymakers.

### **Scholars**

The choice of scholars was partly pragmatic, as a review of existing literature on the issues in question was necessary to get an overview of the thematic field. Another basis for the choice of scholars was their key role in defining educational concepts in general. Their twofold role as constructors of the concept and employees within educational systems where the concept is being implemented makes them a particularly interesting object of study. The decision was made to study their ways of conceptualising the concept of learning outcomes through their products (articles, books, working papers, etc.) on the basis of availability of these sources, making document analysis an efficient method as such documents are traceable through time, stable, and can provide information that is exact and non-reactive to the research process (Bowen 2009:31). To avoid the threat of bias in selection (Bowen 2009:32, Yin 1994:80) the research platform ISI Web of Science, the online digital library ERIC, and the online digital database Source OECD were used to identify relevant literature via two search queries—learning outcomes and outcomes of learning. The publications were chosen expressly for the study. Several publications were also chosen on the basis of citations in already-selected publications. A few publications were only available on the Internet via Google. An effort was made, however, to include literature of major relevance to the study question, as well as literature at the heart of current scholarly debates. Focus was also placed on the quality of the selected literature in terms of peer review and the number of citations. A total of 33

publications were selected between September 2008 and September 2009. (For a more detailed description of the selection process see Prøitz (2010:124)).

### **Teachers**

The choice of teachers as an interesting group of actors was based on their position as ‘makers of indicators for learning outcomes’. In Norway there is a long tradition of teachers grading their own students (currently from grade 8 to grade 13); these grades are final and represent the majority of the grades on the final student report card (Prøitz & Borgen 2009). The grades are included in the databases of Statistics Norway, the main national provider of statistics. As such, the grades assigned by teachers are often used as indicators of learning outcomes and become a point of reference for the situation in Norwegian education. The choice to bring in teachers’ reflections on their own practice of grading is considered important to the study, as it opens up for a broader perspective on education policy focusing on practice within classrooms. Teachers are often the intended receivers and target group of reforms and changes made by policymakers, but teachers can also be seen as local actors in the processes of policymaking, as their decisions and actions shape how policy plays out in practice (Coburn 2006:344).

The overall sampling strategy used in the study was based on an exemplary case approach, the purpose being to select cases that can function as an example of larger patterns (Yin 1994:147). As subjects were a key variable in the study, guidelines to select school subjects in line with the study question of the study were developed (see detailed description in Prøitz 2013a). Based on several considerations, the study encompasses five school subjects: Norwegian, mathematics, physical education, arts and crafts, and science (see Appendix III for a detailed overview selection strategy of subjects). The selection of school subjects determined the selection of informants, as the main focus was interviews with school subject teachers. The distribution of those interviewed is balanced across the selected school subjects, educational levels, and schools.

### **Policymakers**

The choice of policymakers as a relevant group of actors was based on several observations of current developments in Norwegian education policy, focusing on



learning outcomes throughout the last 15 years. As policymakers can be considered to be central to these developments, they become highly relevant for this investigation<sup>28</sup>.

Policymakers can be studied in several ways: via observations, interviews, and document analysis. The choice of document analysis for the purpose of this study was partly pragmatic, due to the previously mentioned advantages of this method. It was also a deliberate choice in relation to the study questions, as one purpose of the study was to try to capture change and development in conceptualisation of the key concept over time; as documents represent text ‘frozen’ in time, they offer a way to chart shifts in meaning over time. Policymakers taking part in interviews may adapt and justify previous standpoints when looking back in time, undermining the suitability of interview as a strategy for this study. The specific type of document to be used was selected based on the findings of a pilot study<sup>29</sup>, which suggested several criteria that – supported the use of the government’s annual proposal for the national budget, known as Parliamentary Report Number 1. The national budget presents the government's program for implementing economic policy and projections for the Norwegian economy (see Prøitz (2013b) for a more extensive description). It is important to underscore that the document selected for analysis represents the government’s proposal for national public expenditure. The final revised national budget amended by the parliament has not been studied, and the reason for this is that it represents another type of text. The revised national budget represents an agreed-upon text that the political parties represented in the parliament established through negotiation, and as such it does not represent the positioning of the government in a strict sense.

### **Document analysis and interviews**

The particularities of the different data require different strategies of data selection and data analysis. For all three studies, a reading guide was developed based on the theoretical and analytical framework to help maintain focus and facilitate the process

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<sup>28</sup> In this study the term ‘policymaker’ is used in a broad way. Even though politicians are the main target group, being the ones who make the decisions and have the responsibility of chosen policies, it would be naive to draw a strict line between politicians and their government officials. Policymaking is a complex process that involves many actors, and therefore policymakers are understood broadly as those who create policy and are have the power to define policy through the formal institutions of policymaking.

<sup>29</sup> The documents were chosen on the basis of a pilot document analysis, which explored a selection of Norwegian policy documents covering the period from 1998 to 2007 (Prøitz 2013b).

of reading and extracting information in a systematic way (see Appendix IV for example of the reading guide).

The reading guides contained categories aimed at identifying the “Y” and the “C” in Searle’s logic rule (“X count as Y in context C”).

**Table 3: The Ys and Cs of the concept of learning outcomes**

<b>Actor</b>	<b>Object of study, the X</b>	<b>The unknown Y</b>	<b>C for context</b>
Scholars	The concept of learning outcomes	conceptualisation ?	scholarly written documents
Teachers		conceptualisation ?	grading practices in the particular subject of the teachers at their schools
Policymakers		conceptualisation ?	the national budget of Norway

The approach to the two document analyses can be described as two different procedures with an overall common strategy. Both follow certain steps, starting with a superficial examination or skimming, followed by a thorough examination and reading before entering a process of interpretation (Bowen 2009:32). This is an iterative process that combines elements from content analysis and thematic analysis (Bowen 2009:32). Bowen defines content analysis as ‘the process of organising information into categories related to the central question of the research’ and thematic analysis as ‘a form of pattern recognition within the data, with emerging themes becoming the categories for analysis’ (2009:32).

**Proceedings of the two document analyses**

The first document analysis (Prøitz 2010) started with the process of skimming the 33 scholarly written documents to identify definitions of and discussions about the key concept. In the second and more thorough reading, a concept-driven (Kvale & Brinkmann 2009) approach, with a few predefined categories, was used to search the documents. This reading also involved developing data-driven categories (Kvale & Brinkmann 2009) (see Appendix IV for reading guide with categories). Data were

extracted from the documents via statements and descriptions illustrating the perspectives presented in the documents. The documents were read several times for the purpose of testing and double-checking categories and identifying information in accordance with the established categories. As an important part of the study was to develop an analytical framework for further empirical investigations, several readings were conducted over a longer period of time to ensure that the final categories were stable and survived the process of repeated readings.

In the second document analysis, a different set of approaches was used. The investigation can be characterised as a two-phase document analysis. Phase one started out as a content analysis with a simple word count of the key concept 'læringsutbytte'/learning outcomes and related concepts in the Norwegian national budget from the annual Report Number 1 (1997-1998) to the Report Number 1 (2010-2011). In this phase, electronic searches were conducted using the advanced search function in the Acrobat Reader program. This gave an overview of the frequency of use of the key concept and related concepts throughout the period, and it also helped to identify textual context for the key concept. The second phase of thematic analysis involved an in-depth reading of texts identified in the first phase. Four budget documents were selected, based on the frequency count and two specific criteria defining these four to be the most relevant and rich in information for the study question. Categories were developed in the same way as in the previous document analysis, using both concept-driven analysis and data-driven analysis. Building on the findings of the first phase took the investigation into a more extensive type of text analysis. First, in-depth readings were conducted using an explorative approach looking for similarities and differences to identify patterns of application of the key concept. Second, a more critical approach was applied to identify how the key concept is used in a descriptive, argumentative, informative, and explanatory way (Pettersen 2008).

### **Proceedings of the interviews**

The data collection for the interview study was conducted at the informants' 'home base', i.e. their schools, in an informal conversational style. The questions and topics covered were based on a semi-structured interview guide. The guide was organised around an opening question asking the informant to describe and exemplify how s/he

proceeds when grading students (see Prøitz (2013a) for more details). All interviews were audio-recorded and transcribed. In analysing the material, patterns of differences and similarities were identified according to the analytical framework. The coding and analysis can be characterised as partly concept-driven, using codes developed in advance based on existing literature in the field (Kvale & Brinkman 2009:202). However, the analysis was also data-driven, as additional codes were developed through the process of repeated reading of the material. This study involved several phases: first an inductive investigation, followed by a more deductive investigation, and finally extensive interpretation and theoretical analysis (Kvale & Brinkman 2009:207).

### **Text and discourse**

The material consists of data that requires text interpretation. Certain issues must be taken into consideration when using a qualitative approach to interpreting the meaning of texts, as this approach resides in the minds of the writer and readers. Thus, the meaning can change from reader to reader and from one historical period to another (Gall et al. 1996). Kvale and Brinkman (2009:2) underscore the importance of seeing interviews as ‘inter-view’*s*, ‘where knowledge is constructed in the interaction between the interviewer and the interviewee’; in this sense, the interview is understood as an interchange of views. In this investigation ‘text’ is understood in a broad sense, as in a range of research on language in use (Halliday 1994: xiv). ‘Text’ in this sense represents more than merely words on a paper; it has been collected and analysed as representations of ideas situated in the particular context of the actors expressing them. The texts have certain characteristics that make them different from each other. Scholarly written documents are different from interview material, and text as expressed in policy documents is again different from these other two types of text. All three types of data represent different genres of communication. The scholarly written documents have been produced within the frame of scholarly work, based on principles and practices used by scholars for establishing arguments and rigorous investigations. Interviews represent text as partly defined by the method applied (e.g. semi-structured interviews), the framing of the interview, the informant and interviewee, and their dialogue where follow-up questions and improvisation are a part of the process. Transcripts of interviews as documents prepared by researchers for the purpose of research are different from documents produced independently of

the researcher (McCulloch 2011:249). Compared with the scholarly written documents and the policy documents, interviews have an oral form and the texts are created 'in the heat of the moment' between those involved, while documents produced independently of the researcher involve considerations of word choice, structure, and argumentation produced over a certain period of time. Policy documents are largely about meaning-making in an effort to convince people of the perspective set out and mobilise them to act. Rhetoric in political debate is often about a struggle over values, and it is often more a question of attitudes than knowledge and facts (Heraldstveit & Bjørge 1992:12). Political rhetoric is about creating a believable picture of a situation and making people act on that belief.

### **Interpretation of the different data material**

In the case of scholars (Prøitz 2010) and policymakers (Prøitz 2013b), searches for data could be kept closely aligned with the analytical framework and the study questions from the very beginning. The case of teachers (Prøitz 2013a) is more indirectly linked to the study question of the case as a whole. Given that learning outcomes is a new concept in Norwegian education (Hatch 2013), it was considered more fruitful to ask teachers about their grading practices. A choice was made at an early stage of the study to interview teachers about their grading practices, as grading is something Norwegian teachers have firsthand experience with; it is a central part of their everyday working life. The data material from the interviews on teachers' grading is understood to be a vehicle for obtaining information about teachers' conceptualisation on the concept of learning outcomes. The data material also provides information on how indicators of learning outcomes (grades, in this case) come about.

### **Choice of methods as problem-driven**

The three studies included in this investigation are first and foremost qualitative studies, but they are also inspired by more quantitative approaches. The choice of selection strategies, with an emphasis on including a wide selection of documents and informants instead of trying to find the special or unique, as is often the case in qualitative research (Gall et al. 1996), is characteristic of the study. A choice of wide samples to cover a broad range of what conceptualisations that can be expected to be observed within the frame of an exploratory case study has been emphasised. In Prøitz (2010:124) it was important to cover a variety of scholarly documents

discussing the concept of learning outcomes, as much of this discussion had taken place outside the sphere of formal academic publishing, meaning that a diverse body of publications had to be included. In Prøitz (2013a) the selection of schools, subjects and teachers was based on what coverage would be required to make claims about the study as an exemplifying larger patterns, based on Yin's exemplary case. This included considerations of geographical location and the size of the schools selected, the age of schools and teachers, the gender of teachers, and the number of teachers represented in each subject, with the aim of securing an even distribution of key variables such as age, gender, and subject area (Prøitz 2013a). In Prøitz (2013b), elements from a quantitative approach can be seen in the first phase of the study, involving a content analysis based on simple word counts; the second phase of the analysis is also based on the results of the word count presented as frequency diagrams (Prøitz 2013b). The approach of this study is problem-driven rather than methodology-driven, meaning that the methods applied were those that could best answer the given problematic (regardless of whether they were qualitative or quantitative) (Flyvbjerg 2011:313).

### **The quality of the study**

The quality of case studies with an exploratory focus relates to; the establishment of correct operational measures for concepts studied (construct validity), the establishment of the domain to which a study's findings can be generalised (external validity), and the demonstration of operations of a study—in other words, data collection procedures can be repeated with the same results (reliability) (Yin 1994:33).

The construct (the theoretical and analytical framework) of the case study is the grounding of the project as a whole; together with the definition of the study question, it is the starting point for the study, the reference point for the choice of methods and selection of data sources and analysis. The construct is also the reference point for the results and theoretical propositions made during the research process and at its end.

Several measures have been taken to ensure the quality of the case study. By establishing a theoretical and analytical framework early in the research process, a solid foundation was established and informed choices were made for further studies.

The data collection process was described and documented thoroughly at each step and should provide the information needed to allow the study to be repeated by others. Every step of the research process was discussed with fellow researchers and Ph.D. candidates nationally and internationally to strengthen the quality of the studies. Additionally, the three cases were presented at international conferences and submitted to international peer-reviewed journals, which are all processes for ensuring academic quality.

### **Ethical issues for consideration**

The data collection for a case study can present various ethical problems (Gall et al. 1996), although the kinds of problems that may be involved relate to the methods used. In general, ethical issues of a case study can be viewed in terms of four types of ethics: utilitarian, deontological, relational, and ecological (Gall et. al. 1996). These four ethical types mostly refer to types of data collection in which people are directly involved, such as interviews or observation. In this case study, this applies for Study 2. Studies 1 and 3 involve people in a more indirect way, as authors of scholarly written documents or policymakers expressing their policy through written statements in policy documents.

Study 2 involves interviews with teachers, which involves a process of collecting and storing audio-recorded data material about individuals that requires a notification to the Norwegian Data Protection Official for Research<sup>30</sup>. The notification of the case was approved by the NSD to be in line with legal and ethical guidelines for research<sup>31</sup>. Ethical issues in interviewing extend through the entire process, and Kvale & Brinkmann have provided a list of ethical issues at several stages of the research process (2009), which were all considered according to their relevance for study 2 (see Appendix VII for a detailed description of ethical considerations in Study 2).

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<sup>30</sup> If research consists of gathering, registering, processing, or storing information about individuals (i.e. personal data) there is an obligation to fill out a notification form (meldeskjema) and submit it to the Data Protection Official for Research. Even if the final report contains no personal data, the project may still be subject to notification if you process personal data while working on the project. <http://www.nsd.uib.no/nsd/english/pvo.html>

<sup>31</sup> The project plan was reported to the Norwegian Social Science Data Services (NSD) and a notification for the project was submitted. The project plan included a detailed description of the project, an outline of the interview guide, and a letter of information and request for participation sent to principals and teachers.

As document analysis does not entail direct contact with those being researched, it is easy to overlook ethical issues with it (McCulloch 2011:254). Ethical issues in document analysis can arise when institutions or persons are named unfavorably; they may also concern legal questions on copyright, freedom of information, or data protection, or the handling of archival documents that might be originals or highly fragile (McCulloch 2011:254). None of these issues applied to the document analyses in this study. The scholarly written documents were public documents retrieved either via the library or the Internet, and referencing and citation have acknowledged all scholars involved. The selected policy documents used in this study are official and publicly accessible documents, and the people named in the study were ministers in governments throughout the studied period.



## **Chapter 5: Cross-case analysis and summary of papers**

### **Introduction**

This chapter begins the third step of the case-study process. Yin describes this step as consisting of cross-case analysis as well as conclusions, discussion, and modification of theory (1994). In this chapter the first part of this process, the cross-case analysis of the findings and conclusions of the three cases is presented. Discussion, conclusion and modification of theory are presented in the following chapter.

The findings and conclusions of the three cases are analysed in accordance with the two-dimensional analytical framework (see Chapter 3) in a cross-case analysis. This analysis is presented in two steps, starting with a narrow focus on how learning outcomes are defined by the actors in the cases applying the logic rule of Searle and the horizontal axis of the framework covering only one of the two dimensions presented (see Chapter 3 for analytical framework). Later in this chapter, both axes will be applied in the two-dimensional analysis. This approach has been chosen to enable focus in the analysis of rich data aligned with the study question and the propositions of this study. The findings and conclusions of the cases are summarised throughout the analysis on a case-by-case basis.

### **One-dimensional cross-case analysis of definitions**

#### **Learning outcomes defined by scholars Prøitz (2010)**

In Prøitz (2010), two main clusters of definitions were identified in the scholarly written documents; the first cluster involved established definitions claiming that learning outcomes must be results oriented, full-ended, and measurable, while the second cluster involved alternative definitions claiming that learning outcomes must be process-oriented, open-ended, and limited in measurability.

The established definitions are often historically rooted in or share similarities with basic ideas from behaviourism, the objectives movement, the curriculum planning movement, or the mastery learning movement (in keeping with Gagné). The definitions often posit that a learning outcome is a written statement of intended and/or desired outcomes to be manifested by student performance. The formulation of learning outcomes and the establishment of criteria for assessing (formative and summative) attainment of predefined learning are essential characteristics of the

cluster. The definitions also bear a strong resemblance to one another in the way they are formulated.

Alternative definitions are often the result of a critique of the established definitions. Scholars make an effort to establish the logic for their alternative definitions rooted in more open-ended perspectives on learning such as cognitive, constructivist, and sociocultural theory (in keeping with Eisner). One key conviction held by these scholars is that it is impossible to cover all learning with pre-specified learning outcomes and thereby impossible to measure all learning. Although these definitions share the same main convictions, they are formulated in significantly different ways.

The findings in Prøitz (2010:133) indicate that there is a debate on whether learning outcomes can be stated in full-ended, stable, pre-specified, and measurable terms or in open-ended, flexible terms with limited opportunities for measurement.

#### **Learning outcomes defined by teachers Prøitz (2013a)**

The findings of the study of teachers' definitions of learning outcomes in terms of grades illustrates that the informants are well aware of the new national regulations for grading and the new national curriculum as part of the education reform of 2006. They report that they consider the formal construct for grading to describe the 'right way' to assign grades. The regulations underline the importance of assigning final grades based solely on performance and knowledge, while previously teachers were also expected to consider student effort, attitude, and participation. With the new national curriculum, an outcomes-based approach has been introduced, describing learning outcomes in terms of competence goals and prescribing an approach to assessment resembling curriculum alignment. At this general level, the informants typically report complying with the notions of the system brought forward by the reform of 2006. The teachers present a definition of learning outcomes that is in conformity with and loyal to the concept presented by the reform, the national curriculum, and the regulations for grading<sup>32</sup>.

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<sup>32</sup>Regulations for the Education Act § 3-7: The summative assessment shall give information about the competence of the student by the end of education in accordance with subjects in the national curriculum, c.f. § 3-3 (my translation). Forskrift til opplæringsloven "Sluttvurderinga skal gi informasjon om kompetansen til eleven, lærlingen og lære kandidat ved avslutninga av opplæringa i fag i læreplanverket, jf. § 3-3."

### **Learning outcomes defined by policymakers (Prøitz 2013b)**

The study reports that the concept of learning outcomes understood as results-oriented, full-ended, and measurable maintains a strong position in policy documents throughout the 14-year period studied, and through the stages of ‘PISA-shock’, changing governments, extensive reforms, and the introduction of standardised national tests and a national quality assessment system. The concept of learning outcomes does not seem to be a controversial policy issue in itself. It has been embraced by subsequent governments and is a powerful driver and justifier for the chosen policy processes.

### **Summary cross-case analysis of definitions**

The one-dimensional cross-case analysis of how actors define the concept displays a certain degree of consistency, leaning towards an understanding of learning outcomes as results-oriented, full-ended, and measurable. The analysis also displays a range of alternative approaches contesting the established cluster of definitions presented by a group of scholars. The cross-case analysis of definitions can be summarized in a figure inspired by Searle’s logic rule.

<b>X</b>	<b>count as Y</b>	<b>in context C</b>
The concept of learning outcomes	Two clusters representing different types of definitions; 1) Established definitions: learning outcomes can and should be stated in full-ended, stable, pre-specified and measurable terms. 2) Alternative definitions: learning outcomes cannot and should not be reduced to full-ended, stable and pre-specified measurements of student performance.	by scholars in scholarly written documents
The concept of learning outcomes	is mainly defined in compliance with and loyalty to the new outcome based national curriculum and new regulations for grading of the education reform of 2006 as mainly results-oriented, full-ended and measurable	by teachers considering their own grading practices.
The concept of learning outcomes	is mainly defined as results-oriented, full-ended and measurable	by policymakers in the Norwegian National budget.

**Figure 3: Defining learning outcomes**

In the next section the data material is analysed with a broader scope following the logic rule of Searle and the two-dimensional approach of the analytical framework.

## **Two-dimensional cross-case analysis of conceptualisations**

The two dimensions of the analytical framework of this study combine statements of definitional content (what it is) presented in the previous section with expressed purpose of learning outcomes (what it is for). This combination is a tool for merging the two dimensions into what is considered the ‘conceptualisations’ of learning outcomes made by the actors studied (see Chapter 3 for further description of this theoretical and analytical framework). To enable a wider two-dimensional analysis, findings presented in the previous section according to the one-dimensional approach are supplemented here with the perspective of the two dimensions seen together. This approach requires some repetition of results presented in the previous section to create a full picture of the identified conceptualisations.

### **Scholars**

The views of scholars divide into two main approaches on the concept of learning outcomes (Prøitz 2010), one representing an established perspective and the other representing an alternative perspective. A majority of the scholars conceptualise learning outcomes using an internal focus, seeing it as mainly a matter of education and instruction planning and curriculum development<sup>33</sup>.

### **Teachers**

The teachers define learning outcomes in varied ways when they describe how they assign grades to their students, and their approaches seem to be highly dependent on school subject. Five different subject areas were investigated. Teachers in arts and crafts describe a grading practice based on a culture of strong assessment communities, which provide a shared standard and a universal grading approach. By contrast, teachers in science and mathematics refer to points on tests as an important tool for assigning final grades. They view this as helping to set a given standard that ensures fairness and universality in grading. Informants in science have slightly different grading practices compared to the mathematics teachers, in that they employ more diverse evidence. Norwegian language teachers primarily employ a continually negotiated approach to final grading. Although they aspire to an ideal of collaboration in assessment communities, they report that they are most likely to discuss grading

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<sup>33</sup> In Prøitz (2010), a smaller group of scholars discussing learning outcomes from a broad accountability perspective (based on Darling-Hammond (2004)) were identified. As the cross-case analysis concentrates on the main findings and conclusions of the case, this issue is not included in the cross-case analysis.

with colleagues when they are in doubt. They are the most open to using a differential approach taking participation into account when grading weaker students. Finally, the informants teaching physical education generally employ a standardised basis for grading, based on pre- and post-skill tests with predefined standards of performance (e.g. timed sprints or repetitions). However, they also see their own professional experience as an important tool for just and fair grading.

The material reveals distinct differences in what teachers consider relevant evidence for grading and how they collect, interpret, and communicate evidence of student performance. These differences suggest that school subjects do matter in grading. School subjects seem to have different frameworks that relate to these variations; some are more restricted, making more direct measurement possible, while others are more open. Teachers in school subjects with a more open framework handle grading in various ways; some develop strong practices of assessment based on collaboration and commonly agreed standards, while others question or reject the ideal of fair and just grading as a realistic aim overall. The study reveals a tension between the school subject as a construct for grading and the universal system (national regulations) for grading as a construct and suggests that different subjects involve different degrees of challenges, and even obstacles, in fulfilling government recommendations and regulations for grading. Some subjects appear to be easily adaptable to an outcomes-based educational system, while others have a long way to go to fulfill government recommendations and regulations.

### **Policymakers**

The conceptualisations set out by policymakers in the Norwegian national budget during the period from 1997 to 2011 display a somewhat different pattern than the other groups of actors, mainly depicting learning outcomes as results-oriented, full-ended, and measurable, with a mainly external focus, although development towards a concept with a more internal focus can be observed over the course of the period studied (Prøitz 2013b). One feature that does seem to vary over time is the policy issues that different governments bring forward under a common understanding of learning outcomes. There is an evident divide between governments in terms of whether the idea of improving learning outcomes relates to all students in general, or to the improvement of learning outcomes in relation to the diversity of the student

body. This is particularly clear in how inequality issues are linked to learning outcomes, the variable uses of results measuring student achievements, and how these issues are linked to policies of centralisation or decentralisation of state control with varying arguments for or against monitoring of results and accountability. The understanding and use of the concept also appears to have undergone a process of maturation and sophistication over time. The findings indicate that the ongoing policy process and the events of policy development affect the uses of the concept of learning outcomes in policy.

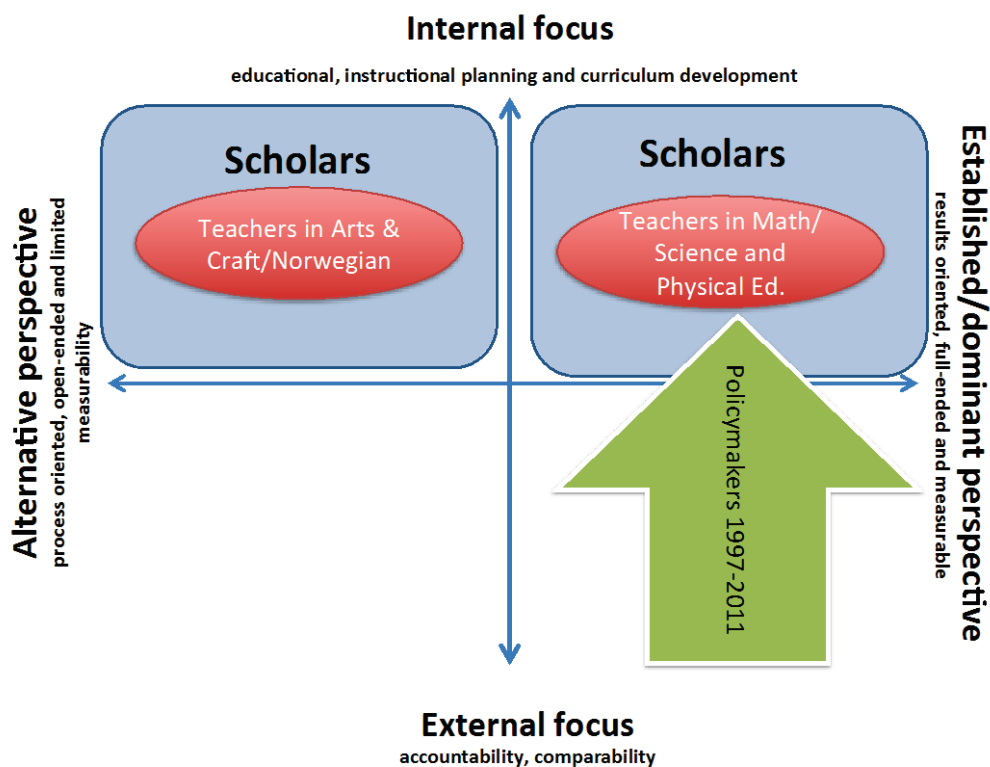
### **Cross case summarised**

The conceptualisations of the group of scholars divides into two broad clusters: one representing the established and dominant perspective on learning outcomes and the other representing an alternative perspective on learning. Both clusters have been categorised as belonging in the upper part of the analytical framework, as the majority of the scholars conceptualise learning outcomes from an internal focus, seeing it as mainly a matter of educational and instructional planning and curriculum development. Likewise, the teachers are all categorised as belonging in the upper part of the matrix as they have been interviewed about their grading practices mainly from an internal focus<sup>34</sup>. The findings separate the teachers' conceptualisations into two main groups dependent on subject area. Teachers in math, science and physical education report seeing their own grading practice as fixed in particular procedures and related to certain given or defined standards. Teachers in arts and crafts and Norwegian language report a more flexible practice of grading, open to continual negotiation and reconstruction within a community of teachers. Subjects seem to frame their conceptualisations of the concept of learning outcomes. The conceptualisations made by policymakers in the Norwegian national budget over the period from 1997 to 2011 display a somewhat different view, mainly depicting

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<sup>34</sup>The presented paper of Prøitz (2013a) is an analysis of data collected within the framing of a larger project funded by the Norwegian Directorate of Education and Training. In the larger project the informants were interviewed about what purpose they considered final grading/grades to have. The typical response to this question was two-sided; first of all, informants believed that final grades served the requirements of society as tools for selection and placement decisions, and for the needs of students to communicate their knowledge, skills and competences by the end of education. Secondly, informants also related grading to issues of pedagogy and motivational aspects, referring to practices that were commonly used before the new regulations were introduced banning these practices as incorrect grading practices. The results of the larger project were reported in a separate publication (Prøitz & Borgen 2010). As these issues have not been included in the paper presented in this thesis (Prøitz 2013a) these findings are not a part of the analysis.

learning outcomes as results-oriented, full-ended and measurable, and with a mainly external focus, although a development towards a more internal orientation can be observed during the period studied. The cross-case analysis indicates that conceptualisations of learning outcomes made by the three groups of actors vary, not only between the groups but also within the groups. Scholars, teachers, and policymakers from subsequent governments seem to position themselves differently when it comes to conceptualisation of learning outcomes. The cross-case analysis indicates that there are several, competing conceptualisations at play within the educational field. There seems to be an established overall understanding, challenged by alternative understandings presented by scholars and formal and informal practices among teachers, particularly in more contextual subjects like arts and crafts and Norwegian language, opening up for more process-oriented approaches. Another issue raised by the cross-case analysis is the empty quadrant of external focus in combination with process-orientation, open-endedness and limited measurability. The findings indicate that the majority of actors studied do not consider this combination relevant for their contexts. The findings of the conceptualisations of the concept of learning outcomes by the three groups of actors can be summarised as shown in Figure 4.



**Figure 4: Conceptualisations of learning outcomes**





## **Chapter 6: Discussion, conclusions and implications**

### **Introduction**

In this chapter, the findings of the cross-case analysis are discussed in relation to the propositions of Adam (2004) and the issues raised by the literature review in Chapter 2. The discussion is organised in line with the two-dimensional analytical framework, starting with a narrow scope of definitions in reference to the horizontal axis ('what it is'). Later in this chapter, the findings of the cross-case analysis are discussed in reference to the two dimensions of the analytical framework ('what it is' and 'what it is for') (see Chapter 3 for presentation of analytical framework and Chapter 5 for proceedings of analysis).

### **One dimensional cross-case analysis of definitions of learning outcomes**

The findings of the cross-case analysis together seem to confirm the first proposition of Adam (1994), which claims that *there is a commonly shared and broadly defined understanding of the concept of learning outcomes*, at least at first glimpse.

At a general level, teachers relate to the concept of learning outcomes as defined in the national outcomes-based curriculum and the national regulations for grading with conformity (Prøitz 2013a). This is not a surprise, as teachers are obliged to practice in accordance with the national curriculum and the regulations for assessment amended by the government. This finding is also in line with results from evaluations of the implementation of the reform of 2006 identifying general approval of the main ideas of the reform among regional and local authorities responsible for schooling (school owners), school leaders and teachers (Aasen et al. 2012). Policymakers consider learning outcomes to be results-oriented, full-ended and measurable. However, a closer look makes it necessary to question the validity of the proposition of Adam claiming a 'commonly shared' understanding, if by that it is assumed there is a commonly shared opinion or agreement. The conceptualisations made by scholars divide into two main clusters and display a fundamental conflict between believers and non-believers, all of which may relate to a common understanding of the phenomena, but where the non-believers recognize it to enable critique and provide grounding for propositions of alternative conceptualisations.

The proposition of Adam (2004:5) is supported by the findings of this case study, but only partially. The study also displays that what is signified by the term ‘commonly shared’ is unclear and possibly oversells the degree of agreement concerning the concept in question. The findings of the cross-case analysis illustrate that a substantial body of the scholarly literature critically questions the concept and proposes alternative definitions, thereby representing a perspective, which has not been included in the picture presented by Adam (2004), by Kennedy et al. (2007), or in the European Qualification Framework Series (2011). Based on this, it seems that there is an established understanding of the concept of learning outcomes that dominates the thematic field; however this study’s findings would suggest that these terms of established and dominant definitions may be more appropriate and accurate than the more persuasive and perhaps even misleading phrase of ‘commonly shared’ understanding.

### **Issues brought forward by the two-dimensional cross-case analysis**

In this section, the findings of the cross-case analysis are discussed with reference to the two dimensions of the analytical framework. The already discussed one-dimensional definitions are discussed here in relation to both dimensions of the framework, definitions and purpose (what learning outcomes is considered to be and for what purposes) leading towards conceptualisations of the concept.

The second proposition of Adam (2004) calls attention to the possibility of different understandings of learning outcomes in practical application. The term practical application may seem awkward when it comes to how a concept is used in language. Practical application of the concept of learning outcomes in this study refers to different ways of using the concept in language, and is considered to capture how actors use the key concept when performing speech acts (illocutionary) talking about or describing practices, distinguished from the speech acts of defining the concept (locutionary). Teachers describe how they see their own grading practices in relation to regulations for grading; scholars study, analyse, and make claims concerning learning outcomes; while policymakers use the concept to argue for certain education policies. These examples illustrate how practical application is understood within the framing of language use in this study.

The findings of the cross-case analysis show how the practical application of the concept of learning outcomes in language is variable in the way the concept is conceptualised by the actors studied. In all three cases, the one-dimensional definition is found to be challenged when actors apply the concept in describing activities in their contexts, implying that the concept is hard to use in a stringent manner, and indicating that the usefulness of the concept in practical application can be questioned.

### **Learning outcomes – a contested concept in scholarly work**

The findings illustrate how the concept of learning outcomes is contested within the sphere of academia. This finding stands in contrast to the harmonious picture of a ‘commonly shared understanding’ of the concept of learning outcomes presented on the international scene (Adam 2004, Kennedy et al. 2007, EU 2011). Within the academic sphere, the disagreement between the perspectives exemplified by Gagné (1974) and Eisner (1979, 2005) seem to persist.

Most scholars in the identified body of literature agree that the concept of learning outcomes is productive in education. However, the way in which the concept can be considered productive is a huge question still up for debate (Smyth & Dow 1998, Hargreaves & Moore 2000, Hussey & Smith 2003, 2008, Allan 1994, Burke 1995, James & Brown 2005). The established conceptualisation of learning outcomes represents a fairly consistent framework for learning outcomes often involving a clear definition, a description and discussion of considerations regarding how best to implement a learning outcomes-based approach and assessment of student performance. Additionally, these conceptualisations often provide a rationale, an aim, and a purpose for the implementation of learning outcomes (Gagné 1974, Spady 1984, Jessup 2005). As such, their perspective can be considered as being presented in a fairly explicit, consistent, and stringent manner.

The cluster of alternative conceptualisations involves a far more varied group of contributions; their common aim is to provide a critique of the characteristics of the established cluster, but this does not necessarily lead to a common framing or consistency in how they understand the concept, or an agreement on how to work with it. Taken together, the cluster represents a great variety of critique, including

concerns about the use of labels such as objectives and outcomes; suggestions of alternative labels or concepts with the purpose of avoiding associations with the objective model or behaviourism; or efforts to widen a perceived reductionist conception of learning outcomes (Hussey & Smith 2002/03, Allan 1994, Eisner 1979, Buss 2008, Entwistle 2005, James & Brown 2005), as warnings against or for the use of outcomes within certain ideological or political perspectives (Smythe & Dowe 1998, Hargreaves & Moore 2000) and concerns about the use of learning outcomes as a central element of system-wide quality assurance and accountability (Hussey & Smith 2008, Lassnigg 2013, Otter 1992, Young 2009). As such, this cluster cannot be characterised as unified within a common consistent and stringent frame, but is better described as a fragmented group of contributors seemingly united by their critical perspective.

These features of the two clusters may highlight the issue of the lack of conceptual debate outside the academic sphere concerning concepts that have an impact on education reform (Mausethagen 2013, Young 2009). A substantial part of the literature is a defense of complex theoretical standpoints of pedagogy or didactics that are grounded in theoretical perspectives of learning, which may limit the debate to a restricted area and audience within a certain academic discourse. To illustrate this possibility, proponents of the OBE movement (Spady 1988, Jessup 1991, Burke 1995) seem to have toned down these issues, possibly freeing themselves from the complex and demanding debates on the relations between outcomes, the objectives movement, behaviourism (Allan 1994, Burke 1995), and issues concerning knowledge and content (Young 2009, Karseth & Sivesind 2010, Lundgren 2006). This also seems to have enabled them to take an approach related to the more concrete problems of schooling recognised by society at large, focusing on the weaker students and a need for a solution to improve the learning outcomes of all students (Furman 1994, King & Evans 1991, Brady 1996). For example the popularity of Spady's ideas has been explained in terms of OBE offering something for everyone (King & Evans 1991). Despite this apparent broad appeal, his ideas for organising schooling might have been too challenging as the realisation of OBE in the United States had stalled for several reasons by the mid-1990s (Brady 1994, 1997). On the other hand, attributes of OBE are recognised as influential in a range of national initiatives around

the world, indicating that the ideas of Spady lives on as national (local) versions of OBE (Killen 2000).

The argument of an enclosed academic debate conceptualising learning outcomes is supported by the findings of scholars discussing the concept of learning outcomes mainly from an internal perspective. This can be seen in how the identified literature is mainly theoretical and analytical, often written for the purpose of discussing developments in education rather than solving concrete problems in education; in this way, these issues may be left to be solved by actors outside academia. As such, discussions on the concept of learning outcomes seem to provide an arena within the academic sphere for scholarly positioning that relates less to the purpose of solving educational problems than to internal scholarly debate.

#### **Learning outcomes and the role of subjects in teachers' grading practices**

The cross-case analysis illustrates how teachers are drawn towards loyalty and compliance with regulations for grading at a general level. However, taking a closer look at the expressed practices of grading, the framing of school subjects, and other factors such as fairness suggests that teachers struggle with the overarching concept of learning outcomes. These findings confirm previous research on fairness in grading (Resh 2009, Tierny 2013), and characteristics of teachers' grading practices in school subjects (Wyatt-Smith & Klenowski 2013, Resh 2009, Eggen 2004, Wiliam 1996).

Prominent researchers in assessment today recognise that grading has multiple meanings and contexts, and that a lack of consistency in grading is a symptom of more complex issues than simply a lack of assessment competence (Brookhart 2013, Wyatt-Smith & Klenowski 2013). The cross-case analysis shows teachers expressing loyalty to regulations and curricula at an overarching level, but also reporting difficulties in applying new regulations within the framing of the subjects they teach (Prøitz 2013a). This difficulty does not appear to be because they do not know current policies or oppose the rationale behind them (Aasen et al. 2012), but because these policies are not a good fit with the characteristics of the subject they teach (Prøitz 2013a, Prøitz & Borgen 2010). The study also shows how certain subjects seem to be more adaptable to outcomes-based approaches than others, with more conceptual subjects being an easier 'fit' than more contextual subjects (Muller 2009), and with

teachers in different subjects dealing with the differences they experience through the use of diverse strategies (standardised vs. continual negotiation (Prøitz 2013b)). This may illustrate that despite outcome-based approaches, subject structure and content continue to have an impact on how teachers think an outcomes-based approach can be applied in practice. As such, the findings of this study oppose the argument of a Norwegian reform with ‘emptying content’ suggested by Young (2009). Instead it could be claimed that the ‘voice for knowledge’ (Young 2009) seems to be invoked by teachers through their struggles to comply with the universal regulations for grading within an outcomes-oriented reform.

The struggles of Norwegian teachers indicate a weak alignment between subject content and the national regulations for grading, particularly in more contextual subjects such as Norwegian language and art education. This may reflect a weakness in considering assessment issues in conjunction with the development or revision of subject content in the national curriculum in Norway (Lysne 2006, Gjone 1983). Yet another issue and a source of more general concern is the extent to which content and the particular characteristics of subjects have been at the center of attention of assessment research. This is not a matter of more studies on how universal principles for grading are applied by teachers or may be supported (Brookhart 2013, Wyatt-Smith & Klenowski 2013), but whether subject content and structure have been sufficiently acknowledged as factors within the field of assessment research.

A recognition that teachers’ grading practices in different subjects have multiple meanings and contexts may be a step towards a more diverse perspective on the issue of consistency in grading. However, the use of grades for multiple purposes (e.g. as indicators of learning outcomes at an individual level as well as at an institutional, national, and international level) still seem to represent a challenge to the field of assessment. Policy requirements for valid measures of learning outcomes seldom contain considerations of the complexities of assessment (and evaluation) but rather embrace contradictory concepts, leaving the job of resolving these contradictions to teachers (Hargreaves et al. 2002). The recognition of a new perspective on the consistency of teachers’ grading practices within the field of assessment (Brookhart 2013) seems to make a call for a renewed discussion on the issues of validity and

consistency of teacher grading within the framing of the uses of grades for multiple purposes as indicators of learning outcomes.

**Learning outcomes – a concept taken for granted by policymakers**

The cross-case analysis has shown that policymakers conceptualised the concept of learning outcomes in a fairly consistent way throughout the 14-year period studied. Some movement from an external focus towards a more internal focus can be observed during the period studied. The findings also report a developmental aspect, as policymakers' conceptualisations increasingly moved towards a more complex and sophisticated understanding of the concept (Prøitz 2013b).

It is important to bear in mind the situation in Norway at the start of the investigated period (see Appendix II for more information about the Norwegian context). In 1997, input and output indicators were registered, but indicators of learning outcomes were scarce (Skedsmo 2009, Hatch 2013). During the investigated period, Norwegian education policy moved to a situation in which a range of measures of learning outcomes was introduced and considerable data on outcomes were made available (OECD 2011, Skedsmo 2009). This development can be seen in relation to discussions on governing by data (Lawn 2011) and the introduction of “quick language” in education (Lundahl & Waldow 2009) and the entering of Norway into the age of assessment and accountability (Hopman 2008). This can also be considered as a development whereby governments try to handle the challenges of an increasingly complex education system, and where the growing complexity leads to a need for information as a central part of governing, but also as a provision of knowledge to the actors in education systems for their decision-making (Fazekas & Burns 2012).

The findings indicate that the results of the first PISA study (presented in 2001) can be seen in relation to a growing focus on learning outcomes in Norwegian education policy (Prøitz 2010). The impact of the PISA studies and an increased focus on the development of qualifications frameworks in Norway can be seen as policy developments influenced by international organisations like the OECD, AEHA, and EU through soft governing and governing by concepts (Mausethagen 2013). The influence might be considered as the direct adoption of the Anglo-American concept

of learning outcomes into the Norwegian concept of 'læringsutbytte', defined in accordance with definitions provided by international organisations<sup>35</sup>. This example, as well as the findings of Prøitz (2013b), underscores how policy often seems to adopt concepts without much debate, possibly taking them for granted (Mausethagen 2013, Pettersson 2008, 2012, Young 2009) and that issues related to whether and how to implement new policies related to such concepts are those discussed. The findings of the case study illustrate this, as subsequent governments have embraced the same (established/dominant) concept of learning outcomes without questioning or discussing how to understand it (Prøitz 2013b). On the other hand, the findings also indicate that policymakers apply the concept to a wide range of initiatives and that there is a divide between governments in whether improving learning outcomes is related to all students in general or to the diversity of the student body. The lack of consideration of new concepts in policy also seem evident in the way in which different governments apply the same understanding to support contradictory ideas in the governing of education. On one hand one government call for clear goals, freedom, and responsibility of local authorities and combine this with monitoring of outcomes focusing on decentralization and accountability; but on the other hand, another government focus on increasing governing and monitoring of outcomes to strengthen the relationship between the central state and the education system, possibly downplaying the accountability of local authorities under the same learning outcomes umbrella (Prøitz 2013b).

Either way, monitoring learning outcomes is considered to be crucial by subsequent governments for the further development of education, as measurements of outcomes are expected to provide knowledge that feeds into the policy processes of governing through problem identification and feedback provision (Fazekas & Burns 2012). The circularity of this process, in which governing and knowledge are considered mutually constituting, requires a minimum of agreement on basic ideas by some actors to create collective action as has been described in the literature (Fazekas & Burns 2012). This can be seen in how Norwegian policymakers have strengthened the

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<sup>35</sup> E.g. "Læringsutbytte/learning outcome: Either the expected skills and competencies provided by a course/ programme of study, or the skills and competencies attained after successful completion of a course/programme of study. (The Norwegian Association of Higher Education Institutions, retrieved 13.08.13 <http://termbase.uhr.no>)



focus on data provision during the last 14 years on a ‘need-to-know’ basis regardless of who is in power (Prøitz 2013b).

The case study confirms the argument of policymakers’ adoption of the understanding of the concept of learning outcomes without questioning it, as the policymakers seem to use a fairly consistent concept of learning outcomes and share a common understanding of the concept in line with the claims of Adam (2004). However, the findings also imply that different constitutional mindsets (Hopmann 2008) allow for (local) variation (e.g. Norwegian accountability characterised as a halfway move by Hatch (2013)) and contradicting initiatives to be taken under the same learning outcomes umbrella. The introduction of learning outcomes in Norwegian education has contributed to a drive towards educational reform (Aasen et. al 2012, Skedsmo 2009), and as such it can be characterised as a strong lever for change (Lassnigg 2011) in Norwegian education policy. Nevertheless, the Norwegian system can still be recognized by central elements of the Nordic model described as “based on cooperation and compromise, with a special balance between the state, the market and civil society” (Telhaug et al. 2006:278), and with a public comprehensive education system, standardisation, universalisation and social inclusion (Aasen et al. 2013). Norwegian education policy has entered the age of assessment and accountability while upholding a traditional strong state, a comprehensive school system, and a general concern for the issues of equality and inclusion.

### **The dominant perspective and exploration of an empty quadrant**

The cross-case analysis implies that the very nature of the contexts inhabited by actors creates different approaches to the concept. This seems to be especially evident in how scholars debate the meaning of the concept, allowing for scholarly positioning and contestation of dominant conceptualisations. In contrast, policymakers frame the concept into one definition, one understanding, and one truth to be acted upon and within, while teachers create a variety of understandings of the concept grounded in the practices of grading and the subjects they teach. The concept of learning outcomes seems to have been given different understandings by the actors according to the functions needed within the framing of their contexts.

The actors in this study relate to the dominant understanding of the concept in one way or another. The study implies that the dominant definition is grounded in the works of international organisations. It also indicates that these may be influential in shaping the understandings of policymakers through soft governing and governing by concepts (Mausethagen 2013).

Understandings provided can be considered as being framed by the needs of policymakers for agreement on basic ideas to create collective action (Fazekas & Burns 2012). In the introduction of this thesis, it was shown that international organisations argue for a commonly shared understanding of learning outcomes, referring to documents written mainly for implementation of learning outcomes at a programme, institutional, or systemic level that are more concerned with issues of how to do this than with problematising the concept itself. (Adam 2004, Kennedy et al. 2007) (see Appendix I for list of documents used).

Additionally, when searching for literature on learning outcomes there is a myriad of available documents addressing implementation of outcomes provided by international organisations, governments, institutions of higher education, and other proponents of outcomes, which are easily attainable through Google (Prøitz 2010). In contrast, research articles discussing the overall concept are less easily available to the public, being retrievable in general only through journal subscription, libraries, or purchase on the Internet. While the dominant perspective on learning outcomes is brought forward by a strong force and through widely accessible channels, alternative perspectives are less widely available and this debate around the concept is largely contained to the restricted area of academia. A consequence of this seems to be that the concept of learning outcomes is understood by one narrowly defined frame seldom challenged in public, despite a variety of practices which seem to linger underneath the surface, and which might lead to false conceptions of what goes on in education.

The cross-case analysis reveals an empty quadrant in the analytical framework: none of the groups of actors seem to consider the combination of an external approach and a process-oriented, open-ended conceptualization limited in measurability as relevant (see fig 4). One interpretation of this finding may be that having an external focus is

considered to require the ‘quick language’ of measurement (Lundahl & Waldow 2009) and outcomes defined by numbers and testing. The combination of the elements within the empty quadrant may be considered impossible and contradictory. Furthermore, the dominant perspective of learning outcomes does not necessarily encourage the exploration of alternative combinations, even though weaknesses of the dominant perspective have been expressed (Lundahl & Waldow 2009, Lawn 2011, Shepard 2000, James & Brown 2005).

Alternative approaches to the identification of learning outcomes in assessment and evaluation have been presented in the literature referring to more constructivist approaches (Shepard 2000, James & Brown 2005), including those suggesting ethnographic and peer review approaches in social science, appreciation and connoisseurship in the arts and advocacy, and testimony and judgment in law for inspiration (James & Brown 2005). These suggestions resemble the points made about a recent shift in assessment research towards recognising different contexts and meanings in grading (Brookhart 2013, Wyatt-Smith & Klenowski 2013). However, there is a question of whether this recognition of a diversity of measures for assessment also applies to measures of evaluations for external purposes.

In the literature review, it was pointed out that to govern by goals requires clear goals balanced with space for local and professional interpretation (Aasen 2012), and that different levels of the system seem to require differentiated learning outcomes information attuned to their particular contexts (Aasen et.al 2012, Møller et. al 2010). This leads to the question of whether the learning outcomes information provided within the framing of the dominant perspective can meet the requirements of the different levels of education systems.

Instead of considering the empty quadrant as impossible and contradictory, it can be viewed as a space of opportunity for the exploration of approaches to learning outcomes that might be productive in meeting the diverse needs of different actors in education. The compound realities of education with its different subject structures and content, assessment practices and regulations, and policy requirements of information and accountability might be better served by offering a more diverse approach by applying a more process-oriented and open-ended perspective on

learning outcomes. The literature review has shown that within the Norwegian context there are examples of policy initiatives that can be characterised as having the external focus of improving consistency of classroom assessment combined with the more process-oriented approach of formative assessment (e.g. Vurdering for læring/National Programme for Assessment for Learning) (Tveit 2013, Norwegian Directorate for Education and Training <http://www.udir.no>) illustrating that there might be projects or programmes exploring the empty quadrant in practice.

A more diverse perspective on learning outcomes could be introduced, allowing a broader debate to take place in both academia and the realm of policy, possibly resulting in an authentic and relevant discussion on the issue of learning outcomes and what should be valued as learning in contemporary society. Such an approach requires actors to recognise the needs of other actors in education and to engage in a dialogue with an aim of reaching a common understanding of learning outcomes, not necessarily to be agreed upon as a final conceptualisation of this complex issue, but to provide an understanding that could be accepted as being productive in making sense of educational changes and for student learning.

### **Conclusions, modification of theory and implications of the study**

In the following sections, the conclusions of the cross-case analysis are presented and the theoretical propositions are modified (Yin 1994). The theoretical and methodological contributions of the study are presented and the limitations of the study are discussed. In the final part of the chapter, some general implications of the study are suggested.

#### **Conclusions**

The aim of this study was to identify how different actors in different educational contexts conceptualise the concept of learning outcomes in theory and practice.

The findings of the study leads to the following conclusion: At an overarching level there is an established and dominant understanding of learning outcomes, but several competing conceptualisations are played out in practical application, both between and within the groups of actors studied.

#### **Modification of theory**

The first proposition of Adam (2004) has been partially confirmed by this study. The study illustrates that there is one common overall understanding of learning outcomes.

It also shows that the notion of a ‘commonly shared understanding’ is unclear and possibly oversells the degree of agreement, as it cannot be claimed that there is a commonly shared understanding in the sense of a singled shared and agreed upon opinion. Rather, there is a debate between scholars who accept the established and dominant understanding, and those who argue for alternative understandings. Scholars suggesting alternative understandings recognise the established and dominant understanding to enable its critique and establish the logic of their arguments for an alternative understanding. This study suggests that a more appropriate way to characterise this situation would be to say there is an established and dominant understanding of the concept of learning outcomes. The study supports and provides empirical illustrations confirming the second proposition of Adam (2004), in the display of different understandings in practical application of the concept in language use, between and within the groups of actors studied.

#### **Contributions, limitations and recommendations for further conceptual research**

This exploratory study contributes to the existing knowledge base on the concept of learning outcomes by providing empirically grounded illustrations on how the concept is conceptualised by three groups of actors in education. The findings contribute to enhancing the importance of considering different understandings and the complexities of the concept in language use at a diversity of levels in education policy, by the application of a ‘vertical’ research strategy.

Methodologically the study contributes to the thematic field of learning outcomes by presenting a conceptual analysis inspired by Searle’s work on speech acts (1995, 2005). This approach allows for the unwrapping of an institutional fact that seem to be taken for granted by policymakers in education policy, and opens up a wider exploration of the concept through the use of ‘how’ questions rather than searching for answers to more limited ‘what is’ questions. By combining ideas on Searle’s speech acts with theories on learning outcomes presented by Gagné (1974) and Eisner (1979, 2005) the study contributes to the field of learning outcomes through a theoretically founded framework for analysis that, over the course of the study, advances into an empirically grounded model for conceptualisations of the concept.

Theoretically, the study provides important discussions and conclusions through illustrations of how different conceptualisations are at play within the field of education, offering a nuanced perspective on the concept. It also provides the important identification of the empty quadrant, the conceptualisation that no one seems to want. The findings contribute to the field by illustrating how a dominant conceptualisation limiting discussions on how to understand learning outcomes can coexist with a seemingly nonexistent conceptualisation in language, the empty quadrant, implying that the full potential of the concept is left unexplored by policy makers, scholars, and teachers in language use.

The study is limited by its data, which focus on speech acts and language use and not what happens in practice. There might be practices that explore the empty quadrant in real life, such as the Norwegian National Programme for Assessment for Learning. This example implicates that studies on conceptualisation of learning outcomes in practice might contribute to a broadened understanding of learning outcomes.

The model presented in this study may contribute to the identification of practices that balance the external requirements of governments with requirements of the internal life of education where the two cross. As such, the model can contribute by pointing to where to look for practical examples of working with learning outcomes. Furthermore, it can provide a basis for taking into consideration the requirements of differentiated learning outcomes information needed by different actors at different levels of education systems.

The study is also limited by its focus on teacher grading practices as an indicator for how learning outcomes are conceptualised by teachers. First of all the data are limited to the stories provided by the interviewed teachers. Observational methods and document analysis of evidence used by teachers when grading might offer a richer insight into how they conceptualise learning outcomes. However, recognition of student performance in summative classroom assessment is first and foremost something teachers construct as an individual opinion and/or in collaboration with other teachers and their opinions, depending on local practices. Thus, interviewing teachers for the sake of this explorative study seem to have been an appropriate choice of method. On the other hand, interviewing teachers concerning other types of

learning outcomes (e.g. application of national qualification frameworks, results of the national tests, national screening tests or the results of the PISA studies) might have provided other perspectives on the concept, but then it would have been hard to include the element of subject which in this study has provided important insights on differences between teachers' considerations in grading and the implications this may have for the multi-purpose use of grades in Norway. Furthermore, it might be easier to interview teachers about their thoughts on learning outcomes today than in the spring of 2010, considering the time that has passed and the increased usage of the concept as a more common term in Norwegian education.

Another limitation of the data is that the voices of scholars and policymakers might have been displayed in a richer way by doing interviews. On the other hand, the study would not have been able to cover the same amount and breadth of conceptualisations within the framing of the study as by doing document analysis for the purpose of obtaining the big picture. However, the study provides a thorough grounding for further investigations of how scholars and policymakers conceptualise learning outcomes. One possible follow-up investigation would be to examine how the concept is understood at the different levels of educational systems, as this has not been directly addressed in this thesis. Another possibility would be to follow up on scholars discussing the alternative perspective to get a deeper understanding of alternative approaches. Yet another possible follow-up would be to further investigate whether policymakers of different parties and ideological standpoints conceptualise learning outcomes differently.

The data are also limited by the choice of focusing on scholarly documents discussing the concept and not to include documents that can be characterised as 'how to do it documents', as they seldom discuss the concept. Even though this substantial body of literature mainly seems to have been worked out under the dominant learning outcomes umbrella (see references in Appendix I), it might suggest practices with a wider scope. Another aspect that could be considered is whether and how subject issues are considered in these documents, and to what extent different subjects are defined in terms of learning outcomes. As such, a study of this material might bring more insights into how learning outcomes is understood in recommendations for practice.

Another limitation of the study may be considered on the grounds of the critique towards Searle's speech act theory as a limited perspective on aspects regarding conversation between actors. This aspect has not been examined here, as it is regarded to be outside the scope of this study. However, a study on how the concept is negotiated within and between groups of actors may provide important knowledge on the dynamics between actors in education policy. Yet, this also points in the direction of including other groups of actors in education, such as students, administrators, and local authorities for a more elaborated insight.

#### **More general implications of the study**

The findings of this thesis suggest that an exploration of a broader approach to the concept of learning outcomes, one that goes beyond the dominant and established perspective, would help encourage and promote authentic and relevant conceptualisation of learning outcomes. This requires the recognition of the diversity of contexts in which the actors studied apply the concept of learning outcomes. Finding ways to grade students in a fair and consistent manner closely aligned with the particular characteristics of diverse subjects calls for more research on grading in varied subjects. Awareness of the uses of grades for multiple purposes further challenges assessment researchers to investigate the relation between grades assigned by teachers and indicators of learning outcomes used at various levels of the system. The findings also suggest that it would be beneficial to have more conceptual studies of the concept grounded in empirical data, and have findings made more easily available to the public in addition to traditional academic publishing; this might facilitate a more informed and open debate on how to understand learning outcomes. A broadened perspective on learning outcomes requires policymakers to question the very concepts introduced through soft governing, rather than considering only whether or how to implement them. It also requires a recognition by policymakers of alternative approaches as valid measurements of learning outcomes, even where these are not expressed in terms of 'quick language'.

#### **Author's comment**

In the initial stages in this thesis, there was a need to make an argument concerning the use of Searle's ideas (1995, 2005) within the field of education, as he does not attempt to describe 'massive forms of human practices' (science, religion, and



education) that do not carry a deontology (2005:19). He also points out that it is important to avoid confusing these practices with money, property, and government. Over the course of the study, and considering the findings that have emerged, I have become more certain that the concept of learning outcomes can be considered to be an institutional fact in several ways, with a strong resemblance to things like money, property, and government. Although it might be questioned whether the concept of learning outcomes qualifies as an institutional fact in a strict ‘Searlian’ way, the contemporary concept of learning outcomes carries the power to define what is valued and appreciated as learning; it represents a lever for change that has contributed to a shift within Norwegian education from focusing on teaching and process to focusing on student learning and results. Nevertheless, Searle considers the field of education to have institutions with plenty of institutional facts within them (2005). As such, the concept of learning outcomes might be regarded more as a concept that paves the way and prepares for the introduction of institutions like outcomes-based national curricula, national tests, universal regulations for grading, and quality assurance agencies and national qualifications frameworks constituting an outcomes-oriented approach in education.



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# Appendices

## Appendix I: Definitions of learning outcomes

Definitions of learning outcomes used in Adam (2004) and Kennedy et al. (2007).

- “Learning outcomes are statements of what is expected that the student will be able to do as a result of learning the activity. (Jenkins and Unwin, 2001)
- Learning outcomes are statements that specify what learners will know or be able to do as a result of a learning activity. Outcomes are usually expressed as knowledge, skills or attitudes. (American Association of Law Libraries)
- Learning outcomes are an explicit description of what a learner should know, understand and be able to do as a result of learning. (Bingham, 1999)
- Learning outcomes are statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of a process of learning. (ECTS Users’ Guide, 2005)
- Learning outcomes are explicit statements of what we want our students to know, understand or be able to do as a result of completing our courses. (University of New South Wales, Australia)
- Learning outcome: a statement of what a learner is expected to know, understand and/or be able to demonstrate at the end of a period of learning”. (Gosling and Moon, 2001)
- A learning outcome is a statement of what the learner is expected to know, understand and/or be able to do at the end of a period of learning. (Donnelly and Fitzmaurice, 2005)
- A learning outcome is a statement of what a learner is expected to know, understand and be able to do at the end of a period of learning and of how that learning is to be demonstrated”. (Moon, 2002)
- Learning outcomes describe what students are able to demonstrate in terms of knowledge, skills and attitudes upon completion of a programme. (Quality Enhancement Committee, Texas University)
- A learning outcome is a written statement of what the successful student/learner is expected to be able to do at the end of the module/course unit or qualification. (Adam, 2004)” (Kennedy et al. 2007:4)
- “A statement of what a learner is expected to know, understand and/or be able to demonstrate at the end of a period of learning<sup>36</sup>.
- Learning outcomes [are] statements of what a learner is expected to know, understand and/or be able to demonstrate after a completion of a process of learning<sup>37</sup>.
- Statements of what a learner can be expected to know, understand and/or do as a result of a learning experience<sup>38</sup>.
- Student learning outcomes are properly defined in terms of knowledge, skills, and abilities that a student has attained at the end (or as a result) of his or her engagement in a particular set of higher education experiences.<sup>39</sup>

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<sup>36</sup>The definition used by the SEEC, NICCAT, NUCCAT Credit and Qualifications – Credit Guidelines for Qualifications in England Wales and Northern Ireland, November 2001.

<sup>37</sup> Source: Final Report of the Socrates Project (Phase 1), Tuning Educational Structures, glossary. This is also the definition used by ECTS in the new 2004 ECTS Users’ Guide.

<sup>38</sup> Source: Credit and Qualifications Framework for Wales, working document, June 2003, page 8.

<sup>39</sup> Source: US, Council for Higher Education Accreditation (CHEA)

- Learning outcomes are statements that specify what a learner will know or be able to do as a result of a learning activity. Outcomes are usually expressed as knowledge, skills, or attitudes<sup>40</sup>.
- Learning outcomes [are] specific measurable achievements.<sup>41</sup>
- A learning outcome is a statement of what competences a student is expected to possess as a result of the learning process<sup>42</sup>.
- Learning outcome statements are content standards for the provincial education system. Learning outcomes are statements of what students are expected to know and to do at an indicated grade; they comprise the prescribed curriculum.”<sup>43</sup> (Adam 2004: 4-5)

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<sup>40</sup> Source: American Association of Law Libraries: <http://www.aallnet.org>.

<sup>41</sup> Source: University of Hertfordshire: [http://www.herts.ac.uk/tli/locguide\\_main.html](http://www.herts.ac.uk/tli/locguide_main.html).

<sup>42</sup> Source: Transnational European Evaluation Project (TEEP).

<sup>43</sup> Source: Government of British Columbia Ministry of education.

## **Appendix II: International and national context of the study**

A contextual description of the learning outcomes-oriented education policy in Norway is presented here, starting with a glimpse into the larger picture of some international developments. As education/learning policy is becoming increasingly homogenous and can be characterised as an emerging global education field (Ozga et al. 2011) I have chosen to point out a few characterising traits with a main emphasis on Anglo-Saxon countries, but also relating to some European countries. The developments in Norway can be seen in relation to several drivers of education policy during the last 20 years. It can also be seen in relation to certain particularities of the Norwegian system prioritising aspects like process and inputs as well as results and outcomes. It must be underlined that this text is not an attempt to give a full account of the situation of learning outcomes globally or in Norway, over time or today, but it will touch on to some characteristics which are relevant for the issues discussed in this thesis.

### **The international context**

Global development towards the end of the 20<sup>th</sup> century has been characterised as remarkable due to growth in the use of assessments for measurement of achievement outcomes in national systems of education (Kellaghan & Greeny 2001). The developments during the last 30 to 40 years have been interpreted as shifts in ideology, in perceptions of quality, and in focus, changing from inputs to outcomes. Throughout the English-speaking world, a major shift in political ideas, moving from issues of equality to issues relating to excellence, accountability and choice in education has been occurring since the late 1970s (Fowler 2012). The development in the United States has been described as a situation in which authorities had given up on engineering optimal mixes of school inputs and became interested in efforts to regulate outputs in the 1980s, followed by an rising accountability script emphasising performance and the crafting of the No Child Left Behind (NCLB) Act in 2001 (Fuller 2009). The development has also been described as a shift in perceptions of quality in education, moving from an input-oriented approach towards an outcomes-oriented approach (Kellaghan & Greeny 2001, Adam 2004).

These developments can be seen in relation to the discovery of tools for measuring the attainment of defined learning outcomes within the institutional effectiveness movement of the 1920s, and, later, the assessment movement of the 1980s, which featured government calls to examine the effectiveness of funding of public institutions of education in the United States (Shepard 2007, Ewell 2005). By the 1990s this approach developed further as systems for institutional and programmatic quality assurance and accreditation (Ewell 2005). Today the focus on learning outcomes is related to two occasionally divergent purposes: autonomy based on accountability and control based on quality assessment to provide guidance in improving teaching and learning (Kuh & Ewell 2010).

Evaluation, assessment, or control of education is not new, but the context in which they operate and the politics may be different (Simola et al. 2011). What can be considered new is the capacity of national systems to observe the whole field and make comparisons between data (Simola et al. 2011) on learning outcomes. A particular feature of the European development has been the increase in the involvement of the Organization for Economic Cooperation and Development (OECD) in educational policy during the 1990s; in particular, PISA has evolved into

an important tool for justifying change or providing support for chosen policy directions (Hopmann 2008, Pettersson 2008, Simola et al. 2011). The impact of PISA on national policies varies; for example, England is described as less ‘marked’ due to its long-term investment in high-stakes testing and its sophisticated system of data production and use (Simola et. al 2011). Norway, on the other hand, seems to have been more strongly ‘marked’ by PISA, perhaps due to a tradition of focusing on inputs and processes rather than measuring results and outcomes.

### **The Norwegian context**

In the case of Norway, a focus on learning outcomes in education policy has been increasingly emergent throughout the government’s educational reforms of the past 10 to 15 years. With the introduction of the Quality Reform in Higher Education in 2003 and the Knowledge Promotion reform in compulsory and upper secondary education and training in 2006 the Norwegian term “læringsutbytte” (more or less equivalent to “learning outcomes” in English) has become widely used to cover a variety of aspects in education. Since 2005 priority has in Norway been given to the development of a national qualifications framework for lifelong learning with reference to the European qualifications framework for recognition of qualifications acquired throughout the Norwegian educational system (Ministry of Education and Research retrieved spring 2013 from <http://www.regjeringen.no/en/dep/kd/>).

There is a long and unusual tradition of skepticism towards formal assessment in Norway, which has resulted in frequent changes in grading scales and troublesome introductions of new directives over time (Lysne 2006). The past decade of innovations and practices in educational assessment in Norway has been described as revoking ideological disputes over educational assessment (Tveit 2013) and illustrates that issues of learning outcomes and assessment are not taken lightly in Norway.

Within the Norwegian school system, there are few traditions for working with pre-defined learning outcomes as opposed to the Anglo-American tradition (Hatch 2013). The practice of assessing student performance according to predefined goals and standards is relatively new; a strong tradition of process orientation has predominated (Engelsen & Smith 2010:417, Hertzberg 2008, Skedsmo 2011, Telhaug et.al 2005).

This reluctance about assessment according to predefined objectives and outcomes has been explained as a particular characteristic of the Norwegian education system (Dale & Wærness 2006). It has been suggested that there was a tradition of teaching without defining particular knowledge requirements during the late 1960s, 1970s and 1980s due to a view in pedagogy that prioritising students’ development through experience in activities was the most important. Within this perspective, defining minimum requirements of knowledge may have seemed contradictory (Dale & Wærness 2006). This situation has been explained as the way in which progressive ideas were interpreted within a Norwegian frame of research and ideological/political culture (Dale & Wærness 2006). The issues can be seen in relation to a debate and critique of positivism emerging in the 1960s. The Norwegian philosopher Hans Skjervheim is known as an important contributor to the debate and a representative of the Norwegian pedagogical philosophical tradition. Skjervheim warned against what he called ‘the instrumental mistake’ (*det instrumentalistiske mistaket*), which he considered a problem of the pedagogy of his time (1972). He characterized this pedagogy as influenced by natural science (e.g. psychological testing, development of

learning theories grounded in stimulus-response psychology) aspiring towards an 'objective' pedagogical science (Østerberg 2003). In the 1960s Skjervheim warned against overlooking the difference between taking a theoretical, pragmatic, and technical approach without considering the practical, moral, and social aspects of working with humans.

Norway has a tradition of a strong central state, and this can be illustrated by how education has been governed through regulations and a national content-based curriculum. The tradition of a strong state governing education can be explained by how 1) education was a central and highly important part of the rebuilding of the nation after World War II (Telhaug 2002) and 2) the project was highly influenced by ideological ideas of a social democratic welfare state characterised by social equality and inclusion (Aasen 2003).

Even so, looking back in history, an ongoing tension between governmental ambitions for governing education and professionals in pedagogy resisting such interventions seem to have influenced Norwegian education policy over the past 30 years (Telhaug 1994). Based on arguments claiming that schools are special organisations that cannot be governed by market, competition, or production, and that management by objectives and control by results upholds an instrumental and technological rationality incompatible with the processes of education, alternative approaches were suggested by professionals in pedagogy emphasising concepts like the professional teacher and school-based evaluation, and claiming that the process of improvement had to start at the school level with a foundation of teachers who were trusted. In the 1990s, this led to a policy combining external control of inputs and school-based evaluations (Telhaug 1994). The education reforms of the 1990s focused on broad general goals, with little attention given to mechanisms that could ensure the attainment of these goals, while the reforms of the 2000s have been engaged in the challenges of establishing new mechanisms and tools for ensuring fulfillment of goals in terms of student results, outcomes and accountability (Hatch 2013). In several ways, Norwegian education policy seems to have been based upon a strong belief in the construction of proper systems, the provision of inputs, and the definition of processes through regulations and national curriculums. Over the past 15 years, these traits have been challenged by an increasing focus on results and outcomes.

The starting point for the development of a more results-oriented approach within Norwegian education is often linked to an OECD report of 1988 suggesting a stronger focus on measurements of results and the need for a system for quality assurance in education (Møller & Skedsmo 2013, Hatch 2013, OECD 2011). In spite of several governmental efforts to create such a system and several initiatives taken,<sup>44</sup> it did not emerge as a system until the first introduction of a national test in 2004 and the Knowledge Promotion reform of 2006, among other things legitimised by evaluations of the education reforms of the 1990s (Haug 2003) and 'below average PISA results' of 2001 (Hatch 2013, Møller & Skedsmo 2013).

With the reform of 2006, an outcomes-oriented education policy was introduced including elements such as: a national outcomes-oriented curriculum, national tests, a

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<sup>44</sup> EMIL-project, Report to the Storting nr 33 (1991-92), Report to the Storting nr. 47 (1995-96), Resolution by the Storting nr. 96 (1996-97), The Moe-report 1997, Report to the Storting nr 28 (1998-99)

national quality-assessment system, new regulations for assessment, and a stronger emphasis on decentralisation, governing by goals, and local accountability (Aasen et al. 2012). The principle of local autonomy is a vital part of the Norwegian political system, but the balance between central and local government is continuously debated (Aasen et al. 2013). The educational reform of 2006 reinforced deregulation and pushed policymaking authorities downwards in the education system, characterising municipalities and counties as ‘school owners’ (Møller & Skedsmo 2013). Today the initial ideas of decentralisation and governing exclusively by goals and results-monitoring have been challenged by policy initiatives to strengthen the control of the central state by governing through the monitoring of results and outcomes, more regulation, definition of activities, provision of support systems, and a system of school inspection (Aasen et al. 2012).

The Norwegian development might illustrate how learning outcomes appeal to a diversity of system logics and maintain a strong position during changing policies pending further development.

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## Appendix III Selection strategy (Prøitz 2013a)

### Selection strategy, five school subjects in lower and upper secondary school

School subjects	Core/support subject		Subjects used in other studies*	Written national examination	Lower and upper secondary level
**Norwegian	X		X	X	X
Mathematics	X		X	X	X
Science		X	X		X
Arts and crafts		X			X
Physical education		X	X		X

\* Resh 2009, Melograno 2007, Eggen 2004, Black et al. 2003, \*\*Norwegian is seen here as equal to studies that have included subjects of first language.

## Appendix IV: Reading guide document analysis (Prøitz 2010)

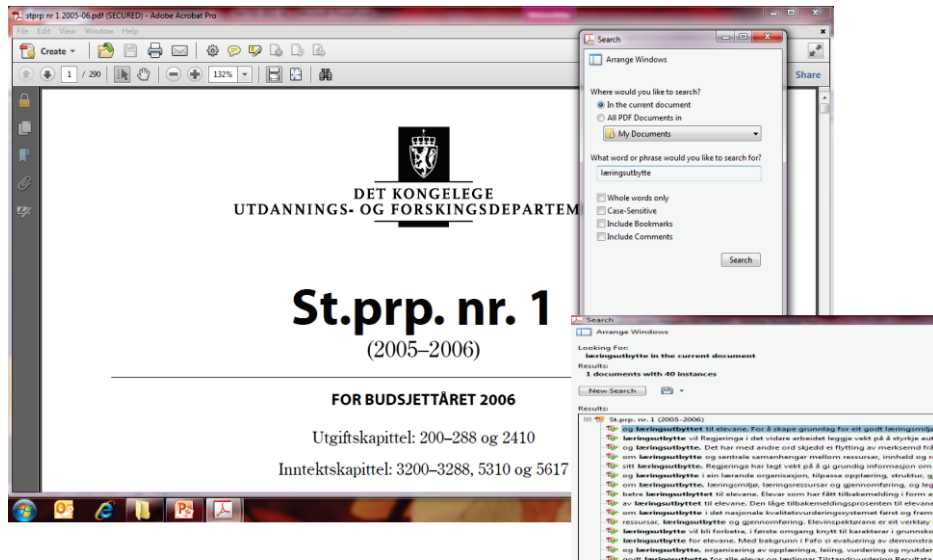
Artikel base: Paper I Learning outcome – what do we mean by it and what is it for?  
Codes

NRbase=number of article and where it comes from XISI=ISI XO=OECD XE=ERIC XB=Book XG=working documents or papers prepared for different kinds of conferences or official meetings available at Google.com". XSS=strategic search, following references TC=Times cited	Country: Given workplace country T.C. : times cited partly from ISI, Google scholar or unknown	How do the authors define, describe or categorize the term learning outcomes. What do they describe it for, what is it for?  The categorization here does not include the authors standpoint, protagonist or antagonist.
Level H=higher education L=lower education G=General Purpose E=educational/instructional A=accountability B=both Study E=empirical A=analytical B=Both		
NRbase IISI	T.C. 2	Definition learning outcome and Learning perspective Outcomes are clearly defined and designate that which is to be achieved at the end of a module or unit. Alternative practice would seek to build on the progressive possibilities that learning outcomes contain. One possibility is to work with a flexible understanding of lo. Collaborative and dialogic process, constructivism
Author Avis, James	Year 2000	Purpose E/I
Titel Policing the subject: Learning outcomes, managerialism and research in PCET	Country UK	Study A
Source British Journal of Education Studies		

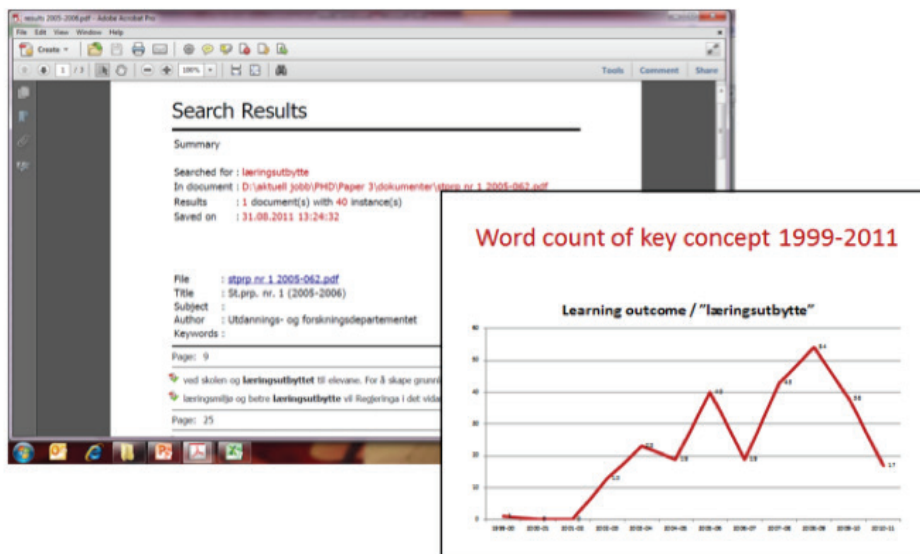
## Appendix V: Searching for the key concept (Prøitz 2013b)

Presentation of the first phase of electronic searches for the concept of learning outcomes with the advanced search function in Acrobat reader (Ph.D.-days NATED 2010).

### Searching for the key concept



### Results of search



## **Appendix VI: Concerning the number of cases**

In multiple-case studies a question arises of how many cases it is necessary to have, and the answer given in the literature is that it depends on the purpose of the study (Yin 1994, Cohen et al. 2011, Gall et. al 1996). Yin considers the question of number of cases in relation to the issue of replication logic (1994:46). He draws an analogy with the experimental method, and suggests that a few cases (two or three) would be literal replication, while four to six cases would give ground for inquiry into two different patterns of theoretical replication (1994:46). However, he also points out that this is a matter of discretion and judgment (as an example, he relates this decision to the way in which quantitative researchers make the choice of the significance level at  $p < .05$  or  $p > .01$  depending on the level of certainty needed). Yin also emphasises that this is a matter for consideration in relation to the sense of the complexity within the domain of external validity (1994).

In a defense of generalisation based on case studies, Verschuren (1993) provides another perspective on the issue of determining the appropriate number of cases. His argument is that a small number of case studies could be used when each of them covers the necessary range of variables. The point he makes is that, because case studies contain many variables and as multi-variable phenomena are recognized by homogeneity rather than variability, researchers identifying case studies with a range of variability can verify external validity (Cohen et al. 2011).

In this study, cases have been selected for the purpose of broadly exploring how actors in education conceptualise the concept of learning outcomes. All three cases consist of a rich set of data material that can be characterised as including a wide range of variables and a high degree of complexity. As mentioned in the extended abstract, the study does not aim to apply strict replication logic but to shed light on the concept of learning outcomes, guided by the propositions of Adam (2004:19). In that sense this study can be thought of as consisting of three explorative cases, which are considered to provide sufficient grounding for the purpose of the thesis.

## **Appendix VII: Ethical considerations in interviews in Prøitz (2013a)**

Given that the aim of the interviews was to select data on teachers' grading practices as they saw it, it was important to get informed consent from each of the 41 participating teachers. The informants were contacted by e-mail with a letter informing them of the issue in question, the themes of the interview, what the data would be used for, and who would have access to the audio recordings and transcripts. They were also informed that the data collected would be treated confidentially, that their participation would be treated anonymously and that the project was approved by the NSD. The informants were informed that they could withdraw from the project at any time, and that, in that case, their data would be taken out of the project and deleted. This information was repeated orally and provided in writing to each and every one of the informants before starting the interview sessions. They were also asked if they would allow the use of the audio recorder. Recordings were not begun until the informants had given their informed consent to participate.

As the principals of the schools had been helping to contact informants, it was important to make sure that none of the informants had been pressured to participate. It was also important to make sure that all informants were familiar with the voluntary aspect of the study and their right to withdraw from the project at any time. A general impression of the interviews was that the informants were comfortable in the interview situation, although in a few instances informants had to be reassured that none of the school leaders would have access to the collected data material. As soon as the interviews had been transcribed, the audio recordings were deleted and informants were made anonymous.

Two experienced researchers were involved in the process of interviewing, something that enabled discussion and validation of records instantly after the interviews; they were also both involved in the process of interpretation, analysing and reporting the data. This is important because of the ethical issue of being faithful to informants' oral statements in transcripts, interpretation, and analysis, and also because of the general quality of the study.

When reporting the results of the study, all references to informants were made anonymous. Despite this effort, it is impossible to make the informants completely

anonymous as the principal and possibly colleagues at the school might know they had taken part in an interview; nonetheless, it should be extremely difficult to identify the statements of any one informant among the 41 teachers.

## **Appendix VIII: Interview guide (Prøitz 2013a)**

The interview guide has been translated from Norwegian to English for this thesis. All 41 informants were Norwegian and the interviews were conducted in the Norwegian language. The interviews started with a presentation of the two interviewers, the scope of the study and some ethical considerations before entering the questions of the guide. The interviews were conducted in a conversation-like manner and did not necessarily follow the rigid structure of the questions as presented here; nevertheless, all questions were covered in every interview.

### **Theme 1: Background information: informant**

1. What are your professional background?
  
2. What subject and at what level do you teach?
  
3. For how long have you worked at this school? Do you have experiences from other schools/any other professional experiences?
  
4. Have you had any experiences of being an external examiner? Have you had any formal training in being an external examiner or do you have experience with other kinds of training in assessment or grading?

### **Theme II: Basis for grading – how – about practice**

5. Can you describe to me how you assign grades in your subject for your students
  - How do you proceed when you make decisions on where a student performance should be placed on the grading scale?
  - What do you emphasise when making placement decisions about a grade? Are there things that you put more emphasis on than others when, for example, a student is standing between two grades?
  - Do you use all of the grades on the scale? How often do you give the best grade or fail students? When you grade do you consider the individual student in relation to the rest of the class?
  
6. Do you see it as possible to grade all of your students fairly? What do you do to ensure the fairest assessment of your students? What do you think can inhibit fair assessment of your students?
  
7. Do you collaborate with other teachers when grading?
  
8. Do you think there are differences between subjects in the basis on which grades are assigned e.g. Norwegian language and physical education? Can you give examples of such differences?



9. Have you discussed the regulations for grading (old/new) seen in relation to the practices you employ here at your school in your subjects?
10. Do you wish you had more support and help when you assign grades? Do you have any ideas on how that could be done?

**Theme III: What does a grade represent?**

11. What do you think a grade expresses?
12. What do you think is the purpose/function of grades, what are they for?
13. Are you familiar with the new regulations to the Education Act Chapter 3 about assessment? What do you consider to be the main message or key concepts (or the like) of the new regulations?
14. Are you familiar with the last changes in the new regulations of the Education Act of 2009? In your opinion, what do you think is the most important change (and what are the consequences)?

**Theme IV: What types of information/evidence are in use when grading?**

15. What kind of information do you use when grading?
16. Do you use any kind of tools to support your grading, e.g. diagnostic tests, tests you have developed yourself, home assignments, presentations, teamwork, etc.?
17. To what extent do you use the national curriculum/a locally developed curriculum when grading?
18. Have you developed any kind of criteria or the like that you use when grading at your school in your subjects? How were they developed and do they help you in your work?
19. Are you familiar with the work on criteria in Norwegian language and Math (7th and 10th, 11th and 12th grade) by the Directorate of Education and Training?
20. Thank you so much, do you have any questions concerning this interview or is there anything you might want to add? Is there anything you think I should have asked you that we did not talk about?

## List of figures and tables

### Figures:

Figure 1: Analytical framework.....	36
Figure 2: The methodological process.....	41
Figure 3: Defining learning outcomes .....	55
Figure 4: Conceptualisations of learning outcomes.....	59

### Tables:

Table 1: Logic rule.....	33
Table 2: Overview: study questions, methodological approach, data material, unit of analysis.....	42
Table 3: The Ys and Cs of the concept of learning outcomes.....	46