The Differentiated English Classroom

Teachers’ approaches to differentiated instruction in group lessons in lower secondary school

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Abstract

This master (MA) study analyses differentiated instruction in English. It combines a descriptive analysis of ten video-taped English lessons in three classes identified among seven different lower secondary schools (Year 9), with an analysis of surveys from the students in one of the observed classes. These data were collected by the Linking Instruction and Student Experiences (LISE) project at the University of Oslo (project leader Kirsti Klette, project coordinator Lisbeth M. Brevik). The data were analysed to identify differentiated instruction in English where the schools in addition to whole-class lessons offered group lessons. The students were separated into groups who had their English lessons at different times during the day. While one group had their English lesson, the other group(s) had lessons in another subject (e.g., maths, Norwegian). Studying naturalistic instruction (i.e., not interventions) in group lessons is valuable for identifying whether such grouping contributes to differentiated English instruction.

First, I found that while organisational grouping in English lessons did occur, this phenomenon was observed in three out of seven video-taped LISE classes only, and the criteria for such grouping varied. At two of the schools, the students were divided into two random groups of equal size, divided alphabetically using their class lists. They received their English instruction in these groups once a week, in addition to whole-class instruction. The third school used ability grouping, assigning the students groups based on pedagogical principles of maturity, independence and effort in a subject. Due to these pedagogical principles, the groups varied in size, and the students received their English instruction in these groups twice a week, with no additional whole-class instruction.

Second, I found the differentiation of the English instruction to vary extensively between the types of groups. While differentiated instruction was very seldom observed at the two schools that relied on random grouping, differentiation was prominent in the observed English lessons at the school which used ability grouping. Furthermore, the teacher’s differentiation in the ability groups focused on the process of learning English, in addition to the classroom environment, while in the random groups, the differentiation concerned the students’ choice of content and product for an oral presentation in English. Interestingly, all situations where differentiation did occur was related to text-based instruction.

The implications of my MA thesis suggest that a particular focus on ability grouping in English lessons in lower secondary school may be warranted to offer differentiated instruction that addresses students’ needs in English.
Sammendrag

Denne masteroppgaven analyserer differensiert engelskundervisning. En deskriptiv analyse av ti timers videoopptak av engelskundervisning i tre klasser identifisert blant syv forskjellige ungdomsskoler (9. trinn), er kombinert med en analyse av spørreundersøkelser fra elever i de observevte klassene. Dataene var samlet av Linking Instruction and Student Experiences (LISE)-prosjektet på Universitetet i Oslo (prosjektleder Kirsti Klette, prosjektkoordinator Lisbeth M. Brevik). Dataene var analysert for å identifisere differensiert undervisning i engelsk hvor skolene i tillegg til helklasse hadde timer delingstimer der elevene var delt inn i grupper som hadde engelskundervisning på forskjellige tidspunktene i dagen. Mens en gruppe hadde sin engelsktime, hadde en annen gruppe time i et annet fag (for eksempel matte, norsk). Å studere naturalistisk undervisning (det vil si ikke intervensjoner) i gruppeundervisning er verdifullt for å identifisere om slik gruppering bidrar til differensiert engelskundervisning.

Ved observasjon av videoopptak av engelskundervisning, fant jeg at organisatorisk gruppering oppstod i tre av syv LISE-klasser, og at kriteriene for slik gruppering varierte. På to av skolene var elevene delt inn i tilfeldige grupper på lik størrelse i delingstimer, fordelt alfabetisk med bruk av klasselister. De hadde engelskundervisning i disse gruppene en gang i uken, i tillegg til helklasseundervisning. Den tredje skolen brukte mestringsgrupper, med elevgrupper basert på pedagogiske prinsipper ut fra faglig mestring, grad av selvstendighet og sosiale hensyn. Grunnet disse pedagogiske prinsippene, varierte størrelsen av gruppene, og elevene fikk engelskundervisningen i disse gruppene to ganger i uken, og det var ingen helklasseundervisning i tillegg.

Videre oppdaget jeg at differensieringen i engelskundervisningen varierte i stor grad mellom de ulike grupperingene. Mens jeg observerte liten grad av differensiert undervisning på de to skolene med tilfeldig gruppering i delingstimer, var det stor grad av differensiering i de observevte mestringsgruppene. Lærerens differensiering i mestringsgruppene fokuset på selve læringsprosessen, i tillegg til klassemiljøet, mens i de tilfeldig inndelte gruppene, var det kun differensiering basert på elevenes valg av innhold og produktet i forbindelse med en muntlig presentasjon. Interessant nok var all differensiering knyttet til tekstbasert leseforståelse.

Implikasjonene av min masteroppgave er at mestringsgrupper i engelsk ser ut til å bidra til differensiering i tråd med intensjonene i Opplæringsloven.
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1 Introduction

“What we can do is to ensure that no matter who you are, no matter what your background, no matter your level of income, that you can get to a level of accomplishment that will allow you to live a life that matches your goals and aspirations, and I think if we could do that, that would be really great.”

(Professor P. David Pearson, University of California, Berkeley, USA, July 9, 2016. From an interview in the TextProject’s series “Legacies of Literacy Scholars”)

Throughout my time as a teacher student and teacher, I have, like Professor P. David Pearson, been genuinely concerned about making students feel that they have reached a designated goal and accomplished something. I have been particularly interested in supporting low-ability students who are not comfortable with being orally active in English, and I have wondered what one could do to make them feel more comfortable in an English classroom. At the same time, one must also take attend to the mid- and high-ability students and make sure all students in the classroom have an English instruction which challenges them based on their strengths and needs. Teaching classes of 20 students or more implies several challenges for a teacher. If a teacher for instance focuses on adapting the content towards the high-ability students in the classroom, the low-ability students will struggle following the instruction (Tomlinson, 2014).

I therefore wanted to identify methods which can help facilitate teachers’ differentiation appropriate for students’ strengths and needs and make instruction more effective. In this study, I use the definition by the Norwegian Ministry of Education and Research [KD] in a recent Official Norwegian Report (NOU): “Differentiation is a feature of a teaching practice where the subject curricula, teaching methods, learning activities and student work are adapted by the teacher to satisfy the needs of the students” (NOU2016:14, p. 66). Although this report is specifically aimed at high-ability students, it nevertheless offers an important perspective on a differentiation in a Norwegian context.

In the media, it is often debated how the classroom should be organised to enhance students’ learning outcomes. Schools have tried out different methods in instruction to accommodate
students with different needs, for instance instruction in smaller groups or instruction in regular classes with increased teacher density (Tomlinson, 2014). In this study, I refer to groups or grouping as when students for an entire lesson or more are organised into groups either randomly (Norwegian: delingstimer) or based on their abilities (Norwegian: mestringsgrupper). While research shows that group division might be beneficial for high-ability students’ learning (NOU2016:14), there is currently no research offering answers concerning the optimal organisation of group instruction for all students in a class (Børte, Lillejord, & Johansson, 2016).

In any classroom, there are similarities among students, but the differences are what make them individuals with individual strengths and needs (Tomlinson, 2014). Students learn in different ways, and a classroom should include an instruction which supports their different talents and interests (Tomlinson, 2014). To identify the differences and individual qualities among students, the instruction must be adapted to each students’ individual strengths and needs so they can more easily master their designated goals (Bunting, 2015). Additionally, students tend to take more responsibility for their learning and are more engaged in learning when they have several options to gain new information (Weselby, 2014). The Norwegian schools are responsible for educating young adults so they can take an active part in the society, using their individual qualities (Bunting, 2015). This focus is especially relevant concerning English in Norway, as there is a need for a high level of English competence to compete in the job market and higher education (Grønvik, 2004; Rindal, 2014).

This master (MA) thesis investigates how teachers differentiate their instruction in English classrooms when students are divided into groups based on different criteria; namely random grouping and ability grouping. Although differentiation can be enacted in all types of classes and groups, I believe in line with Tomlinson (2014) that it is easier to differentiate and address student’s varied learning needs in such groups. If there is a type of grouping, such as random grouping or ability grouping, where differentiation is prominent, this type of grouping may be warranted. Since this has not been studied previously in the Norwegian context, this thesis offers new insight into how differentiation is implemented when students are organised into groups for an entire English lesson or more. To the best of my knowledge, nobody has used video recordings of instruction in groups for the purpose of identifying
differentiation during English instruction before, which makes this MA study both a theoretical and empirical contribution in the field of differentiation.

1.1 Why is differentiation in English important?

Today, English is a global language, which is in use every day on all continents (Simensen, 2014). English as a Lingua Franca (ELF) is a paradigm which occurs when there is communication in English between speakers with different first languages (Jenkins, Cogo, & Dewey, 2011). In business, ELF is frequently used as the language of communication across countries (Hellekjaer, 2007). Furthermore, English in Norway is not only used in business, but also commonly in higher education and in the spare time (Rindal, 2014). Rindal (2013) argues that, “following the increased out-of-school exposure and English language proficiency, English no longer feels foreign to Norwegians” (pp. 1–2). In Norway, the English language is not an official language, but has been considered a second language (L2) since the 1990’s (Rindal, 2014; Simensen, 2014). In fact, proficiency and use are relevant reasons that considering English as a foreign language is inaccurate for Norway:

Norway has traditionally, but somewhat inaccurately, been included among the countries where English is considered a foreign language. This commonly held view is based on a dichotomous notion of the English language as either foreign or second […] Norwegian students seem caught in transition, somewhere between being learners of English as a foreign language and of English as an L2 (Brevik, 2015, pp. 4-5).

When referring to English as our L2, one can define it as “the way in which people learn a language other than their mother tongue, inside or outside of a classroom” (Ellis, 1997, p. 3). In Norwegian schools, the English subject is communicatively oriented rather than grammatically oriented (Ellis, 1997; Simensen, 2014). Chvala and Graedler (2010, p. 75) have explained that in Norwegian schools, “literacy in English develops alongside the pupils’ first language literacy. Other foreign languages, by contrast, are not introduced until after the foundation for literacy has been established”. Although most of the students who enter lower secondary school in Norway, have had seven years of mandatory English language teaching (Graedler, 2002), the teacher must pay attention to the English competence of each student, which includes attention to differentiation. Teachers can differentiate based on each student’s
strengths and needs, and their use of language during the English lessons (Graedler, 2002; NOU2016:14).

1.2 Differentiation in a Norwegian context

The Education Act (KD, 2008, § 1-3) states that “Education shall be adapted to the abilities and aptitudes of the individual student, apprentice and training candidate.” KD further states that adapted education is important to enhance each student’s learning outcomes in the subjects, including English:

Adapted education is what school must supply to ensure that all the students have the best possible outcome of the teaching. It may be connected to organising the teaching, educational methods and progression, work with the learning environment and follow-up of local work with subject curricula and assessment (NOU2016:14, p. 24).

Adapted education is characterized by variation, for instance through exercises, subject matter, intensity of the education, organization of the education, teaching aids and working methods. Teachers must be able to adapt their teaching according to the diversity of the pupils (KD, 2010, p. 6).

NOU2016:14 (pp. 66-67) lists four examples of how to create a differentiated classroom, based on Idsøe (2014) and Tomlinson (2014):

Content: determine the student’s development level, compress the subject matter, adjust the complexity, and allow time to reflect and construe meaning

Process: formative assessment, guidance, learning strategies, different methods of providing information, open tasks to encourage problem-solving methods, flexibility in organising groups and complexity of tasks, self-regulated learning, co-participation

Product: use different media and methods for presenting products, show complex and deep mastery of a topic, self-assessment of effort as part of a metacognitive process

Learning environment: create a safe, risk-free learning environment, dialogue and discussion between students, balance the dialogue between teacher and student, listen with respect, remain open to new ideas and teaching aids, model acceptance of each student’s unique and different abilities and aptitudes
Of particular relevance, since I focus on organisational differentiation in groups, is the Education Act’s (2003, § 8-2) statement that it is not normally allowed to organise permanent groups based on students’ competence level in a subject:

The pupils may be divided into groups as necessary. The groups must not be larger than is justifiable in relation to pedagogy and security. The organisation shall safeguard the pupils’ need for social belonging. Pupils shall not normally be organised according to level of ability, gender or ethnic affiliation (Education Act, 2003, § 8-2).

The term *normally* in the Education Act refers to the amount of time a student is assigned to a group different from their class in order to make sure they experience social belonging and stability at school. That is to say, for periods of time, organisational differentiation can be conducted for the purpose of meeting the student’s needs, aiming to increasing the student’s learning outcome (NOU2016:14). KD expressed in the NOU, that “it is of great importance how schools and teachers group students” (2016, p. 70) specifically considering that social interactions often influence the learning and development of a student, and when composing groups, one should consider whether a student profits from collaborating with peers.

Prior research in Norway has shown that grouping based on students’ ability level has no positive effect on learning and can go awry, while positive learning outcomes are found for students belong to heterogeneous groups (NOU2016:14; Ogden, 2013; Union of Education, Norway, 2013). In heterogeneous groups, the idea is that all students have equal opportunities to achieve at the same proficiency level, and in addition, that both low-ability students and high-ability students can profit from taking part in a classroom where a high-level curriculum and instruction are conducted (NOU2016:14; Tomlinson, 2014) High-ability students are defined as students who have a high learning potential (Brevik & Gunnulfsen, 2016) and low-ability students are defined as students who might need extra support to understand new information (Tomlinson, 2014).

Further, KD (NOU2016:14) argues that organisational differentiation based on social belonging or inclusion does not go against the Education Act considering group organisation, as long as there is a differentiation in accordance with each students’ individual needs. When composing groups, school leaders and teachers should focus on students’ need for social
interactions and collaboration as these contexts tend to be where students fulfil their potential. This might in fact occur in groups based on students with same abilities and students with different abilities (NOU2016:14).

Some Norwegian schools conduct non-permanent ability grouping in some subjects, i.e. English, Norwegian and mathematics, and they believe the students’ maturity, independence and effort in a subject are the best criteria for group divisions to protect the students' social needs, learning and development (Union of Education, Norway, 2013). Ability grouping can therefore be considered as both educational and organisational differentiation. Random grouping refers a heterogeneous grouping, which includes students with different abilities. Several schools lack information and understanding of the options and rules considering organisation of students into educational or organisational differentiation, and these types of grouping are therefore rare in Norwegian schools (NOU2016:14).

Research in Norway further shows that differentiated instruction is effective for both high-ability and low-ability students (Weselby, 2014). In addition, (Brevik & Gunnulfsen, 2016) claim we need more research on how differentiation is conducted in the classroom. They suggest observing classrooms using video recordings to provide new insight into how teachers conduct differentiation in the subjects, which is what I do in this MA thesis.

As previous mentioned, after my knowledge, there are no prior research which investigates the differentiation in different groups at lower secondary school in English instruction in Norway. However, prior MA studies have mentioned the importance of differentiation in instruction and adapted education:

Bugge (2014) based his MA thesis on the differentiation on a policy level concerning lower secondary school. He mentions that since the day school became obligatory for all children and young adults, there is a need for differentiation to enhance learning for both motivated and not motivated students. Furthermore, he brings up different types of differentiation to promote motivation. His thesis focus on differentiation in a historical perspective.

Almlid (2006) has investigated the hallmarks of a differentiated instruction in upper secondary school. She further states that a more active instruction promotes differentiation,
which resulted in a better learning environment. Interestingly, she reveals that this school provides both pedagogical and educational differentiation in order to enhance students’ learning outcome.

Weka’s (2009) research was based on teachers’ common understanding of the term “adapted education” and how the understanding of the concept forms the English instruction. Her findings reveal that most teachers think of adapted education as something which only concerns the individual student, and that they tend to forget the students’ social needs when adapting the instruction.

Bjørkvold’s (2005) research focused on a differentiated instruction related to reading in Norwegian in primary school. She questioned whether students could use interactive books as a way to achieve adapted education, and what in instruction is acquired to achieve a quality adapted instruction.

Hjeltønes wrote in 2016 a MA study where she used video data to observe the quality in teaching when students working with English texts. In line with my study, she used PLATO-elements to analyse her data. Both her study and my study include findings of how students work with texts, but my aim is to find how teachers provide differentiation in order to make students understand the text.

In general, there is a lack of knowledge about what happens in Norwegian classrooms, especially concerning English classroom instruction (Aasen et al., 2012; Brevik & Gunnulfsen). Based on the need to learn more about differentiation in general in Norwegian classrooms, and differentiation in English in particular. I have observed English classrooms using video data to identify to what extent and how differentiation is conducted in English lessons where the students are divided into different groups. To this end, I have observed seven classrooms in lower secondary schools (Year 9), to identify and compare classes with random grouping and ability grouping in English lessons.
1.3 The LISE project

In my MA project, I use video recordings from English lessons combined with student responses to a survey about their English instruction, to identify to what extent the students are satisfied with their way of learning in English. My MA project is part of the Linking Instruction and Student Experiences (LISE) project (Hjeltnes, Brevik, & Klette, 2017, pp. 70-77). LISE was initiated in 2015, in order to study instruction in the 9th and 10th grades in seven classrooms during the school years 2015-16 and 2016-17 and includes instruction in English, French, Norwegian, mathematics, science, and social studies. LISE links video observations from classrooms with data from a student surveys in the video recorded classrooms, and national test data in numeracy, reading, and English. The LISE study has filmed four to six lessons in each subject; giving a total of 300 filmed lessons. The LISE study has gathered data in six of the original classrooms, in addition to a bilingual class. The data collection was conducted in these seven classrooms at seven different schools in 9th and 10th grade. Professor Kirsti Klette is the project leader of LISE, with Associate professor Lisbeth M Brevik as project coordinator.

1.4 Research questions

Based on the above research gap concerning differentiation in English classrooms, my overarching research question is: *To what extent and how do teachers differentiate their English instruction in 9th grade when students are divided into different groups?*

To answer this overarching research question, I have formulated two sub-questions, which are linked to the different steps of my data analysis:

1) *What characterises differentiation provided in English lessons using random grouping and ability grouping?*

2) *To what extent are the students in different groups satisfied with their English instruction?*

I observed video recordings and analysed them both qualitatively and quantitatively to answer sub-question 1. Further, I analysed student questionnaires quantitatively to answer sub-question 2.
1.5 Concepts

In this section, I will summarize the central concepts used in this MA thesis. A concept can have several definitions, but I have chosen the ones I think are the most suitable for this study.

Adapted education concerns the organisation of the teaching, educational methods and progression that the schools should offer to ensure that all the students have the best possible outcome of their teaching. This includes the learning environment and local adaptations of the subject curricula and assessment (NOU2016:14, p. 24).

Differentiation is considered “a feature of a teaching practice where the subject curricula, teaching methods, learning activities and student work are adapted by the teacher to satisfy the needs of the students” (NOU2016:14, p. 66) which is in line with how the Norwegian researcher Fosse (2014) describes differentiation; as the methods we use to adapt the education to fulfil students’ individual needs. Convery & Coyle (1993, p. 1) highlight the importance of also differentiating the time use by defining differentiation as “the process by which teachers provide opportunities for pupils to achieve their potential, working at their own pace through a variety of relevant learning activities.” These three definitions combined are suitable to describe the term differentiation for this thesis.

The differentiated classroom includes “teachers who provide specific alternatives for individuals to learn as deeply as possible and as quickly as possible, without assuming one student’s road for learning is identical to anyone else’s” (Tomlinson, 2014, p. 4)

Grouping is a term for a certain composition of students into groups. Random grouping is in this context understood as heterogeneous groups of students, while the term ability grouping is understood as students who are assigned to homogeneous groups based on the students’ maturity, independence, effort in subjects. This is considered legal in the Norwegian educational context, as long as the groups are dynamic and the students are not placed into these on a permanent basis (Education Act, 2003, § 8-2; NOU2016:14).
**High-ability students** are in this study defined as students who have a high learning potential and achieve grades above average. (Brevik & Gunnulfsen, 2016) In addition, based on Tomlinson (2014, p. 19) they may need:

- To skip practice of previously mastered skills and understanding
- Activities and products that are complex, open-ended, abstract, and multifaceted, drawing on advanced reading materials, or
- A brisk pace of work – or perhaps a slower pace to allow for greater depth of exploration of a topic

**Low-ability students** are in this study considered students with less developed readiness, based on Tomlinson’s (2014, p. 19) characterisation. These students might for instance need:

- Someone to help them identify and make up gaps in past learning so they can move ahead
- More opportunities for direct instruction or practice
- Activities or products that are more structured or more concrete, with fewer steps, closer to their own experiences, requiring simpler reading skills, or
- A more deliberate pace of learning

### 1.6 Outline of the thesis

In addition to this introductory chapter, the thesis consists of Chapters 2-6. In chapter 2, I will present the theoretical framing of my MA study. In Chapter 3, the methods used for this study will be illustrated and explained. Further, Chapter 4 elaborates my findings, which are discussed in Chapter 5, in line with the presented theoretical framing and prior studies. In Chapter 6, I conclude by summarising my findings and the discussion, and offer practical implications for differentiated English teaching, in addition to suggestions for further research. The appendixes include English translations of two examples provided in chapter 4, and a signed consent form for the LISE project.
2 Theoretical Framing and Prior Research

In this chapter, the theoretical framing will be presented, based on the overall topic of differentiation in the English lower secondary classroom, I will explain the theoretical perspectives I link to the concept of differentiation. I choose to base my study on sociocultural theory, as it concentrates on students’ learning and development in the social learning environment of the English classroom, both in groups and individually. First, Vygotsky’s sociocultural theory and the Zone of Proximal Development (ZPD) will be presented (2.1). Second, I look at how teachers can differentiate their instruction according to organisational and educational differentiation in the English classroom (2.2). Third, I elaborate on educational differentiation in English, using Carol Ann Tomlinson’s theory of the differentiated classroom (2.3). Finally, I present features of differentiation in a sociocultural context to develop English competence (2.4).

2.1 Vygotsky – Sociocultural theory

Lev Vygotsky’s theory about the sociocultural perspective of learning focuses on the use of language and participation in social interaction to develop knowledge (Dysthe, 1999) In a sociocultural learning environment, students are considered active rather than passive learners; trying to make sense of new knowledge in a personal, social, and cultural manner (Daniels, 2008 in Brevik, 2015). Further, language learning in the Vygotskian sense encourages students to reflect upon information first in social interaction, and then individually, as part of a process where they connect their learning and development to a wider meaning (Brevik, 2015). The Vygotskian perspective on learning and development is relevant for my MA study, since the students participate in a classroom situation with other students and the teacher, and since differentiation in the English classroom is concerned with how the teacher offers opportunities for the individual students to develop both on their own and with others.

One of Vygotsky’s concepts is The Zone of Proximal Development (ZPD), which focuses on a child’s development in a social situation (Chaiklin, 2003) Vygotsky defines ZPD as the “potential development as determined through problem solving under adult guidance or in
collaboration with more capable peers” (Vygotsky, 1978, p. 86). Figure 2A illustrates ZPD in terms of identifying a gap between a child’s actual level of development (current understanding) and its potential development; what they do not understand on their own, out of reach (Coffey, 2009). The ZPD is illustrated as the middle circle, what a child can understand with help from their teacher and peers.

![Figure 2A](image)

**Figure 2A.** Model based on Vygotsky’s concept of Zone of Proximal Development (Vygotsky, 1978)

Figure 2A illustrates that there is a limit to how much the individual student can develop without assistance (Dysthe, 1999). However, where there is for instance a teacher present to help the student understand a task, analyse a text or be critical to a statement, the student’s ZPD expands (Dysthe, 1999). The students can use each other and their teacher to develop their understanding. Dysthe (1999) further claims that the instruction should be on a higher level than the students’ current level of understanding, which in English is relevant for all the communicative skills they are expected to develop; listening, speaking, reading, and writing (KD, 2012).

For the English teacher, a challenge can be to adapt the instruction to the higher level for everybody in the classroom, as all students have their individual strengths and weaknesses. Therefore, to develop their students’ English skills, the teachers should not only identify their
students’ needs and strengths, but also each student’s potential to develop. In other words, teachers need to identify each student’s ZDP in order to differentiate their instruction in a way that enhances learning and development (Hedegaard, 2005; Lyons, 1984).

Vygotsky’s theory of ZPD is in this thesis used as a theoretical lens to identify whether English teachers differentiate their instruction in various types of groups (i.e., random grouping, ability grouping) to help their students understand more than they would on their own. I will try to identify whether division into these groups seems to support the students’ individual needs in line with ZPD. In the next sections, I will therefore look more thoroughly into how English teachers can differentiate their classroom instruction according to principles of organisational and educational differentiation.

### 2.2 Organisational and educational differentiation

The concept of differentiation can be divided into two categories; *organisational differentiation* and *educational differentiation* (Fosse, 2014; NOU2016:14). *Organisational differentiation* refers to how the instruction is structured, led and organised in groups based on for instance the students’ maturity, independence, effort and interest in a subject, also called subject differentiation (NOU2016:14). The purpose of using organisational differentiation is to properly fulfil students’ need for development in the subject.

In homogeneous ability groups, teachers can more easily differentiate their instruction across the groups (Coe et al., 2014). However, teachers can often overdo the differentiation by making instruction too fast for low-ability students and too slow to follow for high-ability students. Both situations can contribute to less student motivation (Coe et al., 2014). There are challenges that arise when students follow heterogeneous ability groups. A teacher should meet the students at their individual ability levels and their readiness to develop new knowledge. Students work in different pace, and if there is no time for slower-working students to pick up the slack, they will not be able to follow new instruction (Tomlinson, 2014). Another challenge can be that the amount of work the teacher requires students in heterogeneous groups to do, could result in high-ability students waiting for low-ability students to finish so they all can move on (Tomlinson, 2014).
Educational differentiation on the other hand, concentrates on a differentiation to satisfy students’ learning needs and abilities. This type of group composition refers to a differentiation in students’ learning, development and teaching. To fulfil this, the teacher can adapt the content, process, product and learning environment according to the students’ potential, prior knowledge, motivation and different ways of learning (Fosse, 2014; NOU2016:14; Tomlinson, 1999). Such differentiation is based on the adjustments and adaptions a teacher can do in a regular classroom. The adaption can also be done by adjusting the difficulty of tasks, the amount of work and the speed of instruction (Fosse, 2014). Further, educational differentiation should contribute to increase the students’ motivation in the subject if teachers conduct challenging activities and tasks link to the students’ interests (NOU2016:14). Students at all levels will still need help by a teacher or other students, in line with the idea of the ZPD.

In the United States, Kulik and Kulik (1982) found out that mid-ability students and low-ability students had no beneficial effects of being organised into ability groups. However, there was to a little extent profit in ability grouping with high-ability students, mostly a positive outcome considering the students’ attitudes towards a subject. Further, Slavin (1990) followed students for two years or more and have results which reveal that there is absolutely no positive effect of having students in ability grouping in any subject, and that there is in fact a negative effect in the subject of social studies. Additionally, in groups with low-ability students had a high risk of receiving an instruction with a lack of quality (Kulik & Kulik, 1982). In Great Britain, Kerckhoff (1986) reported similar findings. He compared students who were separated into ability grouping based on their academic level with students in heterogeneous groups, with results showing that the students in high-ability groups gained more from instruction, while low-ability students had no positive learning outcome. The results were based on data collected over a five-year period in mathematics and reading (Kerckhoff, 1986).

In contrast, Ireson and Hallam (1999) identified positive aspects concerning ability grouping related in Great Britain. However, the positive aspects were not related to the academic outcomes, but rather non-academic ones. These concerned phenomena such as students’ self-esteem and their attitudes towards school in general. Their findings showed how aspects of the school environment may influence organisational grouping, and suggested that when
composing groups, one should base them less on the students’ abilities and instead on the students’ effort in a subject.

Despite the fact that several studies emphasize the benefit of using the concept of differentiation in classroom instruction, there are some critiques of differentiation in general and of Tomlinson’s theory. Delisle (2015) argues that differentiation does not work and is a failure because it is impossible to differentiate in a heterogeneous group as there are so many various students with various needs. In addition, he states that there is a risk of having an instruction where low-ability students receive too simplified tasks and only high-ability students receive the more challenging tasks. He further claims that Tomlinson’s differentiation model demands too much from a teacher, and that teachers need a model which is actually possible to follow. In Sweden, Ramberg (2016) studied to which extent there were ability grouping at Swedish schools, and his findings revealed that 43% of the 764 participating Swedish schools conducted ability grouping. The groupings were most often conducted in mathematics, but also in Swedish and English. In addition, ability grouping occurred more often in Swedish lower secondary school than in Swedish upper secondary school. In line with Delisle (2015), he claims that there are no positive effects of conducting ability grouping

Delisle’s (2015) and Ramberg’s (2016) views concerning how difficult it might be to differentiate in groups, is of particular relevance for my MA study, as their statements seem to support my aim of identifying to what characterizes differentiation in heterogeneous groups (i.e., random grouping) compared to homogeneous groups (i.e., ability grouping). While conducting ability grouping is one way to achieve organisational differentiated instruction, the English teacher might offer educational differentiated instruction within both random grouping and ability grouping. I will in the following section explain educational differentiation in more detail by using Tomlinson’s (2014) model of differentiation.
2.3 The differentiated classroom

To understand what differentiation may look like in a classroom, I use Carol Ann Tomlinson’s (2014) theory and conceptualization of differentiation as the main source. She has developed her theory and differentiation model since 1999, which can be used in all subjects at school, including English.

In a differentiated classroom, teachers should not only focus on the content in instruction and covering the curriculum, but also make satisfaction in learning, by for instance conducting different activities based on students’ interests (Tomlinson, 2014). In the differentiated classroom, researchers should therefore focus on how teachers teach and how students learn, rather than what teachers teach and what students learn. As mentioned, Tomlinson (2014) defines differentiation as: “a teacher’s proactive response to learner need, shaped by mindset and guided by general principles of differentiation” (p. 20), as illustrated in Tomlinson’s model of differentiation (Figure 2B).

The model can be read as compassing three levels. The first level covers principles of differentiation, the second level presents elements of differentiation, and the third level comprises student-centered differentiation. As an explanation for the rationale for such differentiation, Tomlinson (2014, p. 16) argues that,

> teachers who practice differentiation accept as a given that they will need to create a variety of paths toward essential learning goals and to help students identify the paths that work best in achieving success. […] They know that some students who are learning English will do so as a matter of course, while others must struggle mightily.

In order to delve into more detail concerning Tomlinson’s model as tool for teachers’ differentiation, I present the three levels in the following.
Figure 2B. Differentiation of Instruction (Tomlinson, 2014, p. 20)
2.3.1 Principles of differentiation

The first level lists five general principles of why to differentiate; **an environment that encourages and supports learning, quality curriculum, assessment that informs teaching and learning, instruction that responds to student variance and leading students and managing routines** Tomlinson (2014). The first principle demands “an environment that encourages and supports learning”; suggesting that such an environment is a prerequisite for differentiation to work. This principle is considered key to student development by creating a good learning environment where students can feel valued as the person they are, and where students work together to enhance each other’s development. In addition, there is a safe classroom environment in which students can just as well make mistakes and succeed.

The second principle, **quality curriculum**, focuses on the importance of creating a curriculum which is organised in a way that supports learning. Learning from the textbook is not enough or even possible for all students. Tomlinson (2014) argues that it is crucial for teachers to clearly inform the students about what is essential for the students to know, understand and be able to do. This way, students who struggle can more easily concentrate on the most important information. The third principle, **assessment that informs teaching and learning**, focuses on the importance of seeing assessment and instruction as inseparable. This implies that the teachers should offer formative assessment in each lesson as part of the instruction, to develop the students’ competence. Assessment is imperative for the teacher to learn about each student’s current understanding and help them understand more with help (in line with ZPD).

The fourth principle, **instruction that responds to student variance**, concerns how the instruction should respond to the variance of students and their individual needs and identities. In a classroom, there are different students and the teacher should therefore use different types of activities. The teacher should be familiar with each students’ strengths, weaknesses and interests and conduct activities thereafter. Additionally, in a differentiated classroom, the teacher knows each student’s capacity for learning and will support them in a way that their hard work will pay off.

The fifth principle, **leading students and managing routines**, of differentiation emphasizes the importance of the teacher actually leading the students in their learning and managing the routines in the classroom. Examples of success in doing this, a teacher should give thoughtful
and clear directions when introducing multiple tasks. Further, a teacher can establish routines for students needing help, which means students must learn to give and receive help from other students, not only the teacher. Additionally, the classroom should have a preventive atmosphere against challenging behaviour. This first level offers these principles as key characteristics of differentiated classrooms.

2.3.2 Elements of differentiation

The second level in Figure 2B addresses what to differentiate consisting of four elements; content, process, product and affect/environment (Tomlinson, 2014, p. 20), which refers to what I have defined as educational differentiation. The second level of her model is therefore most relevant of this thesis. Content refers to the input the students are expected to know, understand, and be able to do to reach a given learning goal. Additionally, the content includes information from different sources, for instance textbooks and web-pages, that students should be familiar with.

The process, concerns procedures and practices the students use to take in and make sense of the content. Often, the process is shaped by the activities initiated by the teacher during classroom instruction. The activities should be connected to specific learning goals and ensure that individual students understand and create their own ideas about the topic of instruction (Tomlinson, 2014).

The product focuses on how students show what they can do, understand and have learned about the content. However, the product does not cover everything a student produces during a lesson, for example responses to questions linked to a text is not considered a part of product. Instead, the product in Tomlinson’s model refers to culminating or summative products like texts, tests, presentations and projects.

The final curricular element on level 2 is affect/environment, covering social interactions, climate and conditions in a classroom which form the learning environment. Classroom environment is in this model understood as teachers’ managing student behaviour in a way that facilitates learning. These features describe the climate and tone of a classroom.

Examples of how teachers can differentiate the classroom environment can be by changing the students’ seating, and using resources such as assistant teachers to enhance the learning
environment. If students need for instance supervised practice, clarifying misunderstandings and explanations, an assistant teacher can organise learning activities in a smaller group of very few students during a lesson. Students are more likely to be active in a small-group instruction, and therefore learn more (Tomlinson, 2014).

By changing the seating of students, the teacher can prevent unnecessary noise between students in the classroom. Students who have difficulties following normal instruction could benefit from extra help, by for instance assistant teachers. Students’ negative behaviour conforms to the activities, leaving the teacher an opportunity to differentiate the instruction to improve the learning environment. So, expanding the capacity to learn means creating a climate in which that feeling of enfranchisement and entitlement is systematically broadened and strengthened – not weakened, undermined or simply ignored. In a positive climate, students’ questions are welcomed, discussed and refined, so the disposition to question becomes stronger and students participate actively (Claxton, 2007; Coe et al., 2014)

Additionally, in a differentiated classroom, students tend to be more engaged in the learning process, which leads to fewer discipline problems (Weselby, 2014). Brevik & Gunnulfsen (2016) mention the importance of a student feeling recognised and “seen” by the teacher in a good learning environment in the classroom, to strengthen the students’ confidence. Related to my MA study, this is relevant as students who feel safe and confident are essential in a classroom where English is practiced.

### 2.3.3 Student-centered differentiation

The third level in figure 2B demonstrates that the instruction ought to be based on the students’ *readiness, interests* and/or *learning profile* (Tomlinson, 2014, p. 20). *Readiness* is not fixed and is not a synonym for ability. It is an “entry point relative to particular knowledge, understanding or skills” (Tomlinson, 2014, p. 18) and refers to the student’s developed approximation towards specific learning goals. For example, to avoid gaps between the students’ prior knowledge and new knowledge, they might receive help to identify and understand the missing links through differentiated instruction. This principle is closely related to the ZPD. Furthermore, describes the importance of differentiating the instruction according to the students’ *interests*, such as their curiosity and passion for a specific skill or topic. Finally, the students’ *learning profile* concerns the ways a student
learns, which might be formed by “intelligences references, gender, culture, or learning style” (Tomlinson, 2014, p. 19).

Based on this description of how teachers can differentiate their instruction using Tomlinson’s Differentiation of Instruction model (2014), I will now introduce features in English instruction where differentiation can be provided, to develop students’ English competence.

### 2.4 Differentiation in a sociocultural context to develop English competence

In the English classroom, it is essential for language teachers to conduct activities that focus on both input (listening and reading) and output (speaking and writing). Students should be supported when learning a new language to help them develop as users of English. Since the differentiated instruction I identified in this study, all focused on text-based instruction (talk about text and silent reading), I will in the following present two strands of theories. First, I discuss Krashen’s (1982) input hypothesis and Swain’s (2001) output hypothesis. Second, I discuss RAND Reading Group’s (2002) seminal theory on reading comprehension.

#### 2.4.1 Input and output hypotheses

The *input* can be explained as the instruction the teacher provides in order to introduce and explain the objectives and ideas in the lesson (e.g., reading and listening) (Krashen, 1982). The *output* (e.g., writing, speaking) on the other hand, concerns on showing the comprehension of the input (Swain, 2001). To learn English, learners use both input and output, and it is therefore important for this study to see whether there is differentiation in these features.

Krashen (1982) refers to $i$ as the knowledge we already know in a language, both in terms of linguistic competence and to put gained knowledge in context. Learners go from $i$ to $i+1$ by understanding an input (messages, information etc.) which contains new knowledge. This is comparable to Vygotsky's ZPD as both concepts are based on how learners build new knowledge on current knowledge (Dunn & Lantolf, 1998). However, the approach of
acquiring the new knowledge is different as Krashen (1982) believes that everyone learns a language in the same way, and that is when one understands the information given by those who inform. A teacher who has a high-level knowledge of the content in addition to quality in instruction, are those who most likely can convey a comprehensible input (Krashen, 1982). The content in instruction is what acquires new knowledge, not how the teacher is expressing him- or herself (Krashen, 1982). Krashen (1982) further explains that it is the teacher's fault if the input is not comprehensible, so if a student does not acquire new knowledge, the output, is not the reason for language learning, but rather a help to learn the language. For instance, if a student sits completely quiet in a classroom for several months and only listen to the instruction without having any oral communication in the target language of learning, the student will still be able to speak the language (Krashen, 1982).

Swain (2001) on the other hand, believes that one cannot achieve language skills only by input, one must also produce output to actually learn how to use the language. When a learner speaks a foreign language, the learner will be “pushed” into the process of learning. The output demands more effort from a learner than the input, and in this way, the learner is more active in the learning process. During the production of the output, a learner will become more aware of weaknesses and gaps in his or her own language. Like this, it will be easier to know what to focus more on to improve and make progress in the target language of learning. Additionally, students can receive feedback on their oral skills from the teacher, which is completely impossible without output (Swain, 2001).

A teacher should engage students into collaborative work with tasks that encourage them to speak and think about the language they use, also called a collaborative dialogue (Swain, 2001). In such dialogue, the focus should not be on the form of language, but more on the meaning of what is being said. Knowledge building dialogue, which is reflecting on what has just been said in a conversation, is where new knowledge is created (Swain, 2001). This theory can also be linked to the ZPD because it concentrates on using each other in a sociocultural context to develop knowledge. Swain (2001) explains that the output is a socially-constructed cognitive tool, which can align with Krashen’s (1982) statement that an output implies a conversation between at least two persons.
Nevertheless, a classroom has often students who are not orally active, and prefer to stay silent during the whole lesson. Krashen believes that the “push” which Swain emphasizes, can contribute to unpleasant situations for students. He further lists suggestions of why some students are not orally active in a classroom situation; students may have a lack of motivation, low self-confidence and/or having high anxiety. If the anxiety is directed towards the language, and the classroom is a place where students feel their weaknesses will be revealed which further leads to embarrassment, students prefer to remain silent (Krashen, 1982). However, the fact that a student prefers to not be orally active, does not necessarily mean that he or she does not understand the content in instruction. There is rather a block that prevents the student to speak out loud, and this block is called the affective filter. What a teacher can do to lower the affective filter, that is to say making students more comfortable with speaking, is to not base a whole lesson on oral activities, not provide correcting feedback too early during the lesson and teach topics that interest the student (Krashen, 1982). When a conversation interests language learners, it can be so engaging that the learners forget they are speaking in a foreign language.

In sum, Krashen (1982) means that students learn a new language when a teacher provides comprehensible input in a classroom where the environment can lower the affective filter. Swain (2001), however, is certain that language learners develop language skills when they conduct knowledge building dialogues in a sociocultural context.

Students with high-level oral skills have good opportunities to be strong readers and learners because interactions increase the students' motivation and participation in the classroom (RAND, 2002). Although reading can be seen as clear input, it is also beneficial for students to do something with the tasks, for instance involving output to talk about the texts. As previously mentioned, the differentiated observation is related to text-based instruction, and therefore, I will tie this up to reading.

2.4.2 Reading comprehension

Reading is, as mentioned above, one aspect of the process of input for students of English. Additionally, reading is the most important skill at school and the reading instruction is important in order to prepare students for working with the content in a text, as well as the challenging tasks that may follow (RAND, 2002). RAND further argues that, “good instruction is the most powerful means of developing proficient comprehenders and
preventing reading comprehension problems. Narrowly defined, comprehension instruction promotes the ability to learn from text” (RAND, 2002, p. 29 original emphasis). Relating reading comprehension to differentiation, teachers thus need to give social support to students who need help to understand texts (Goldman, Snow, & Vaughn, 2016).

The term reading comprehension is defined by the RAND Reading Group (2002) as “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language” (p. 11), which is illustrated in their model of reading comprehension (see Figure 2C). Three elements are included in the model: the text, the reader, and the activity, which engage in an “interrelationship that occurs within a larger sociocultural context that shapes and is shaped by the reader and that interacts with each of the elements interactively throughout the process of reading” (RAND, 2002. p. 11).

![Figure 2C. A heuristic for thinking about reading comprehension (RAND, 2002, p. xiii)](image-url)
RAND (2002, p. 12) defines the terms in Figure 2C as follows:

*The text that is to be comprehended.*  
*The reader who is doing the comprehending.*  
*The activity in which comprehension is a part.*

The text

The text in the RAND-model concerns what that the readers read, and the content as well as other features of a text influences comprehension, in terms of the extraction of information from the text (RAND, 2002). These features include the surface code (wording of the text), and the text base (ideas representing the meaning of the text). In addition to conventional paper-based texts, the definition of text includes electronic texts and multimedia documents, which requires different ways of reading (RAND, 2002).

A text represents one source of input in an instruction (Keh, 2016). Some researchers claim that students should be familiar with as much as 98% of all the words in a text to enjoy and understand the reading (Day & Bamford, 2002). RAND (2002) claims that students who do not read on their own, and are not motivated to read regularly, will have difficulties with engaging in and progressing from texts in several subjects. Day & Bamford (2002) suggest that because students are different, the texts offered in the classroom should be different, which acquire a differentiation of the content by the teacher (see Tomlinson, 2014).

The reader

As the reader reads a text, he or she constructs different representations of the text at hand. Goldman et. al (2016) argue that students should refer to the text and be able to argue for how they found the meaning of the text. However, not only the meaning of the text contributes to comprehension, but also these constructions of representations done by the reader. When students read interesting material and thus feel mastery, their motivation is likely to increase. Further, this might lead to more use of time on reading, which will result in making students become better readers (Day & Bamford, 2002).

Carlson et al. (2014) define good readers as those who can develop relevant and knowledge-based comprehension from what they read. In addition, good readers refer to the text and use quotations to support their thoughts (Spires, Kerkhoff, & Graham, 2016). In contrast, this
process can be difficult for struggling readers, who might need more support to develop reading comprehension (Carlson et. al, 2014).

There are different types of texts a student can be offered in terms of differentiation, but Day & Bamford (2002) stress the notion that students should engage in extensive reading to acquire a new language. Extensive reading can be motivating for students if the language is not outside their reading ability and their ZPD. When students are orally active and are asked to paraphrase what they have read, the competence of reading should be revealed, and it will be easier for the teacher to identify the student’s reading level (Carlson et al., 2014). In other words, whether a reader experiences a text as easy or difficult to read depends on factors inherent in the text, the link between the text and the reader’s knowledge and abilities, and the activities in which the reader participates (Schwanenflugel & Knapp, 2016).

The activity

The reading activity, in which the student is engaged, needs to be suited to the text at hand. For instance, searching for an electronic text demands that the reader is able to identify whether the text is relevant, in contrast to a text chosen by the teacher, which might be intended to be read more deeply in class (RAND, 2002). The teacher should use different activities directed towards readers who are at different levels, not least because differentiating the tasks which are connected to the reading of a text, the teacher can more easily identify how the students understand what they read (Carlson et al., 2014). Grabe (2009) further states that, “different reading tasks should help provide information about many component reading abilities as well as reading comprehension more generally” (p. 358).

In addition, the tasks should demand that students make inferences at a higher level than they already are, and work with questions beyond what the text requires, to increase their reading comprehension and enable them to become more focused and read consciously (Grabe, 2009; Ness, 2016). To answer such tasks in the classroom, students can help each other understand (cf. ZPD). Furthermore, Ness (2016) states that, “when teachers create time and space for children’s questions, powerful learning and interactions occur” (p. 194). From a sociocultural perspective, teachers in a classroom should focus on creating a supportive and engaging environment where students can feel comfortable taking risks. This will make language learning and teaching more effective (RAND, 2002)
Tomlinson (2014) suggests that students can meet in smaller groups, also called literature circles, to talk about the texts or books they are reading, as collaboration in organised groups develops individual learning. The purpose is to enhance understanding in a sociocultural context, and different groups can read different literature. This idea is in line with Spires et. al (2016), who suggest that organising students into groups based on interests can be advantageous for differentiation. The teachers can provide different goals to different reading groups (RAND, 2002). For instance, good readers can be asked to analyse the text at an intellectually challenging level, and struggling readers can concentrate on identifying new or difficult vocabulary (RAND, 2002).

For students to develop as readers in collaborative reading groups, the tasks linked to the text should be purposeful and give opportunities to discuss, debate, and write (Goldman et. al, 2016). In sum, RAND (2002) argues that “teachers who give students choices, challenging tasks, and collaborative learning structures increase their motivation to read and comprehend text” (p. 41). They further suggest that teachers should focus on teaching students new vocabulary and give analytical tasks based on the texts at hand. She emphasises that the teacher might offer reading instruction in organisational groups, which make it easier to differentiate at group level (RAND, 2002).

This chapter highlights that the concept of differentiation in classroom instruction can be divided into organisational and educational differentiation. Several studies show that using organisational differentiation is not optimal for student learning. In order to develop English competence, listening and reading (input) in addition to speaking and writing (output) are important activities. The benefit of sociocultural learning is that it offers opportunities for the individual students to develop understanding both on their own and with others.
3 Methodology

In this chapter, I present the methods I have used in order to answer my research question: *To what extent and how do teachers differentiate their English instruction in 9th grade when students are divided into different groups?* I first present the research design (3.1), next, I introduce the sample chosen for this thesis, including information about the participants (3.2). I then specify the data I use, and how the data were collected (3.3), as well as how I have analysed the data (3.4). Finally, I discuss the research credibility of this MA study (3.5).

3.1 Research design

I have used a mixed methods research (MMR) in this study, which is characterized by the collection and analysis of both qualitative and quantitative data, where the findings are integrated and draw inferences based on the qualitative, quantitative and mixed methods findings (Creswell, 2015) The research design of this MA study, integrates the two forms of data, video observation and questionnaires, see Figure 3A.

![Figure 3A](image.png)

**Figure 3A.** The conducted data for this MA project
As shown in Figure 3A, I have chosen to combine video observations and questionnaires. I first analyse the video observations qualitatively, using the full transcriptions from all the English lessons. I then analyse the same video observations quantitatively, using pre-defined codes in an observation protocol (PLATO). Third, I analysed student questionnaires quantitatively. Finally, I integrated the qualitative and quantitative analyses to answer my research questions. These analyses will be explained in detail below.

In line with Johnson et. al. (2007), using MMR design enabled me to look at the data from different from different perspectives and compare them (Johnson, Onwuegbuzie, & Turner, 2007). This design helped me identify similarities and differences between the English instructions at School 3 with ability grouping and Schools 2 and 1 with random grouping. I show the three steps in Figure 3B, illustrating how the two data sources were collected at the same time, and analysed separately, before I compared the results to find confirmations (Creswell, 2014). The data analyses will be described in detail in Section 3.4.

Step 1: My MA project started by an invitation into the LISE project where the needed data was already collected. I signed an Agreement of Confidentiality and Non-Disclosure before I started watching all video-recorded classrooms with English instruction. I sorted out ten video recordings of classrooms where instruction in groups was conducted as my aim was to find differentiation in groups.

Step 2: I transcribed four video recordings from School 3 with ability grouping and looked at others’ transcriptions of the random grouping at School 2 and 1. I used Tomlinson’s differentiation model to identify where differentiation occurred in all ten classrooms with both ability grouping and random grouping. Then, I was PLATO-certified by the LISE team, in order to analyse and code the video recordings with PLATO-elements. With the scores from the PLATO-coding, it was easier for me to see the differences between group A and B at each school, and the differences between each school. Finally, the student responses from the questionnaire were punched into Excel where I could find the average scores for the groups. The questions from the questionnaires were categorised into seven constructs, and I found the average score for each category.
**Figure 3B.** Mixed Methods Design: Procedural flowchart in four steps

### Qualitative data:

**Aim:**
Discover to what extent there is differentiation at schools with English instruction in groups.

**Data Collection:**
Video observations of ten English lessons where grouping is conducted.

### Quantitative data:

**Aim:**
Discover to what extent the students in different groupings are satisfied with their English instruction.

**Data Collection:**
Questionnaires from students at the sampled schools.

---

### Step 1:
- **Qualitative analysis:**
Transcribe video recordings and identify differentiation in ability grouping and random grouping, using Tomlinson’s model.
- **Quantitative analysis:**
Analyse video recordings to identify specific features of differentiation between ability grouping and random grouping, using PLATO-codes.

---

### Step 2:
- **Qualitative analysis:**
Identify and compare similarities and differences between the group instruction by using the qualitative and quantitative analysis of video observations and surveys
- **Quantitative analysis:**
Summarise the students’ responses related to their English instruction, and present these as frequencies in a bar chart.

---

### Step 3:
**Interpretation of the merged results**
Interpret, discuss and summarize how the merged results can give a wider understanding than the separate results and how they together can answer my research questions.
Step 3: I compared my qualitative and quantitative analysis of the video recordings to discover the similarities and differences in instruction between random grouping and ability grouping, and between the two groups at each school. Then, I compared the analyses of the video recordings and the analysis of the questionnaires to compare the observed differentiation in the classroom with the students’ experiences of their English instruction.

Step 4: The merged results were interpreted and discussed to answer my research questions and to find implications for further research.

3.2 Participants

In this section, I will introduce the participating schools, and why they are relevant as participants for my study. I used a purposeful sampling frame, which aims to discover theoretical insights from representatives of the students (Bryman, 2015). The strategy of purposeful sampling in this study was based on group characteristics sampling because it gave me specific information which revealed important patterns within groups of interests (Patton, 2015). In total, the LISE-project has recorded seven schools in Year 9, where one English classroom from each school was video-recorded. Since my MA study focuses on English instruction in groups, I only needed to use the data from the schools that offered English instruction in different groups, which occurred at three out of the seven schools.

School 3 is the only school with ability grouping linked to the LISE project, and I therefore analysed data from this school. Here, the ability grouping is dynamic (students can be placed into different groups throughout the year) and all English lessons during the week are given in these groups. Further, the procedure at School 3 is to organise all students in Year 9 into three groups when teaching mathematics, Norwegian and English. All the groups have English classes with the same English teacher at the same day. I chose to observe two groups from School 3, one group with high-ability students (group A) and one group with low-ability students (group B). To obtain a clearer understanding of the differences between the groups, I chose to exclude data from the group with mid-ability students.

I compared the data from School 3 with data from two other schools, School 2 and School 1, which offered random grouping in English. At these schools, the English lessons were given
in these groups once a week, in addition to whole-class instruction. While School 3 assigned the students to groups based on pedagogical principles of maturity, independence and effort in a subject, Schools 2 and 1 based their grouping on the alphabet as they used the class lists to randomly organise students into two groups (groups A and B).

I have observed every video-recorded English lesson from groups A and B at School 3, School 2 and School 1. Table 3A provides information about the video-recorded schools, including background data of the teachers in these classrooms and information about the respondents of the questionnaire.

**Table 3A. Sample.** schools, background information of the English teachers, and students

<table>
<thead>
<tr>
<th>School</th>
<th>Grouping</th>
<th>Teachers</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Gender</td>
<td>Age</td>
</tr>
<tr>
<td>3</td>
<td>Ability</td>
<td>Female</td>
<td>40-49 years</td>
</tr>
<tr>
<td>2</td>
<td>Random</td>
<td>Female</td>
<td>60 + years</td>
</tr>
<tr>
<td>1</td>
<td>Random</td>
<td>Male</td>
<td>40-49 years</td>
</tr>
</tbody>
</table>

*Note.* Stp = study points

### 3.3 Data collection

In this section, I will describe the collected data and the advantages and disadvantages by using secondary data collected by others.

**Table 3B. Data.** Overview of the video recordings and the questionnaires used

<table>
<thead>
<tr>
<th>School</th>
<th>Data</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Video recordings</td>
<td>2 lessons</td>
<td>2 lessons</td>
</tr>
<tr>
<td></td>
<td>Questionnaires</td>
<td>20 questionnaires</td>
<td>8 questionnaires</td>
</tr>
<tr>
<td>2</td>
<td>Video recordings</td>
<td>2 lessons</td>
<td>2 lessons</td>
</tr>
<tr>
<td>1</td>
<td>Video recordings</td>
<td>1 lessons</td>
<td>1 lessons</td>
</tr>
</tbody>
</table>
3.3.1 Video recordings

Video recordings are data sources used in qualitative research where the researcher has the opportunity to “systematically look for patterns that would be impossible to observe directly” (Blikstad-Balas, 2016, p. 1). That is to say, when using video recordings, one has the advantageous opportunity to rewind parts of the tapes to observe details and make a descriptive transcription. Also, in my experience, it was easier to compare and analyse the collected data when I was able to watch and listen to it in the order I would like. Table 3C demonstrates the advantages and disadvantages of video recordings.

There is a standard procedure of how the videos linked to the LISE project are recorded. There are two cameras in the classroom, one directed towards the teacher and the blackboard, and one directed towards the students. In this way, all the informants are present in the videos. If there is a student who is not supposed to participate in the video (of for instance ethical reasons), but follows the lesson, the student will be placed outside of the camera angles. In addition to the cameras, there are two microphones where one is placed in the middle of the classroom and the other one is carried by the teacher.

3.3.2 Questionnaires

In this study, I have used a questionnaire originally made by Dr. Ronald F. Ferguson in 2001 at Harvard University in the United States (Tripod, 2015). A questionnaire is a research instrument with several questions used to collect information. The collected data is often structured and numerical to make it easy to register the data (Cohen, Manion & Morrison, 2011).

The questionnaire used in this study is called Tripod 7 C’s and collects information about students’ opinions of their instruction. Additionally, the questionnaire was tested and validated in the United States before it was sent to Norway where it was translated into Norwegian, and three questions added, before it was piloted by Professor Kirsti Klette and her team at the University of Oslo. The Norwegian version contains 41 questions.

The questionnaire Tripod 7 C’s is relevant to measure the participants’ views on their grouping. However, since School 1 is the only one where the students have all their English lessons in ability groups, the questionnaires are only used for School 1. At Schools 2 and 3,
they have their English lessons in a combination of random grouping and whole-class instruction, which makes it impossible to use their answers as information about their experiences of the grouping.

In this MA thesis, I use the word “questions” when I am talking about the content of a questionnaire, even though the questionnaire in this study in fact consists of several statements which require students to agree in different degrees. Advantages and disadvantages of using a questionnaire is shown in Table 3C.

**Table 3C.** Advantages and disadvantages for my MA study of using video observations and questionnaires (Cohen et al., 2011; Luff & Heath, 2012)

<table>
<thead>
<tr>
<th></th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Video observation</strong></td>
<td>- Opportunity to rewind recordings&lt;br&gt;- Opportunity to transcribe an observation&lt;br&gt;- Opportunity to show recordings to others and discuss and analyse together&lt;br&gt;- Opportunity to observe the classroom from different angles</td>
<td>- The quality of the sound and camera might vary, at times making it difficult to hear everything that was being said</td>
</tr>
<tr>
<td><strong>Questionnaires</strong></td>
<td>- Easy to compare results across groups&lt;br&gt;- Quick to code and analyse</td>
<td>- No opportunities for respondents to add comments&lt;br&gt;- Internal research bias</td>
</tr>
</tbody>
</table>

The disadvantages are explained more detailed in Section 3.5.1 about research credibility.

**3.3.3 The reuse of data collected by others (secondary data use)**

It is not common to use qualitative data collected by others for research (Dalland, 2011), however, for video data it is more common (Blikstad-Balas, 2016). For me as an MA student, it was a clear advantage to join the LISE project and be able to use secondary data. On a positive note, it was time-efficient, as I did not have to find informants myself or contact schools to find relevant classes to observe. As the LISE data were collected to observe naturally occurring instruction, I had the opportunity to observe to what extent and how differentiated instruction occurred in English group lessons. In addition, I could contact
researchers connected to the LISE project who could validate my analysis. Because I use qualitative data collected by others, I can find new and important perspectives of already analysed data (Dalland, 2011).

Nevertheless, using secondary data entails the possibility of receiving data without sufficient information (Dalland, 2011). For example, I could have experienced a lack of differentiated instruction, which would have made it necessary for me to collect a new data set. Similarly, using a questionnaire made by others could limit my opportunities to find information related to differentiation, which I was prepared for. As mentioned above, since the English lessons at two of the schools combined instruction in groups and whole class, I was unable to use the questionnaires from Schools 2 and 1. For School 3, I definitely have answers to many of my questions in the collected questionnaires, but if I were to make the questionnaire myself, I would have narrowed the questions even more to find more detailed and precise answers concerning differentiation in the groupings at all three schools. In addition, there are ethical guidelines that need to be specifically considered when using data collected by others, and I will explain the requirements that a researcher needs to maintain in Section 3.5.3.

3.4 Data analysis

An observation can be analysed with both a qualitative and a quantitative approach (Ackroyd & Hughes, 1981). As shown in Figures 3A and 3B, I analysed the collected data both qualitatively (video recordings) and quantitatively (video recordings and questionnaires). In this section, I will explain the procedures I used to analyse the data and how the categories I have used can be tied and linked to differentiation in English instruction.

3.4.1 Step 1

I started the whole process with watching the ten video-recorded lessons. I transcribed the videos, which implies that I had to stop the videos several times to listen what was said, and see what was done in the classroom. When I identified differentiated instruction, I categorised the situations using Tomlinson’s categories of Content, Product, Process and Environment:
Content: The information and ideas students grapple with to reach the learning goals
Process: How students take in and make sense of the content
Product: How students show what they know, understand and can do
Environment: The climate or tone of the classroom

I checked twice that what I had analysed actually was differentiation in the process, content, product or environment, either at group level or at individual level. For more details about these four categories, see Figure 2B in Chapter 2.

3.4.2 Step 2

In the quantitative analysis, I observed the situations where differentiation had been identified from the qualitative analysis in Step 1. I used The Protocol for Language Arts Teaching Observations (PLATO 5.0), which is a system of codes to use when observing English language arts instruction (ELA). PLATO includes 12 core elements that cover 12 different aspects of an ELA classroom instruction. PLATO was designed to capture effective teacher instruction with the purpose of developing an improvement of literacy skills among 4th - 9th graders (Grossman, 2015). It is important to state that PLATO is not designed to capture all the different areas that are important in a classroom, for example aspects of differentiated instruction.

However, as the differentiation identified in Step 1 related primarily to reading comprehension, I used the four PLATO elements in Table 3D: Text-based Instruction (TBI), Classroom Discourse (CD), Intellectual Challenge (IC), and Accommodation for Language Learning (ALL). I coded each 15-minute segment for these four PLATO-elements on a scale from 1-4 (see Table 3D) to identify to which extent these elements characterised the differentiated instruction identified in Step 1.

According to the methodology used in the LISE project, I divided each lesson into 15-minute segments. When analysing videos with PLATO-codes, one must stop the observation after 15 minutes and give one score for each element for this segment. When the scoring is done, the observation continues for 15 more minutes, in a continuous cycle of observing and coding.
Table 3D. The Protocol for Language Arts Teaching Observations (PLATO 5.0): Elements used in my MA study to characterise differentiated English instruction.

<table>
<thead>
<tr>
<th></th>
<th>1 Provides almost no evidence</th>
<th>2 Provides limited evidence</th>
<th>3 Provides evidence with some weaknesses</th>
<th>4 Provides consistent strong evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC</td>
<td>Activities are rote/recall</td>
<td>Mostly rote/recall, some analysis/inference</td>
<td>Analysis/inference/ idea generation/ interpretation</td>
<td>Sophisticated or high-level analytic and inferential thinking</td>
</tr>
<tr>
<td>CD</td>
<td>Opportunities: Few or no opportunities for student talk</td>
<td>Opportunities: Occasional opportunities for student talk</td>
<td>Opportunities: Opportunities for student talk for at least 5 minutes. Only 2-3 students participate</td>
<td>Opportunities: Opportunities for student talk for at least 5 minutes. The majority participates by speaking and/or listening</td>
</tr>
<tr>
<td></td>
<td>Uptake: Rarely or none response to students’ ideas</td>
<td>Uptake: Briefly response with no elaborative discussion nor help to develop</td>
<td>Uptake: A balance between brief responses and higher-level uptake</td>
<td>Uptake: A consistent engagement in high-level uptake. Responses expand on student ideas</td>
</tr>
<tr>
<td>TBI</td>
<td>Use: No authentic text present</td>
<td>Use: Refer to details authentic text</td>
<td>Use: Active use of authentic text to gain wider understanding</td>
<td>Use: Active use of authentic text for a sustained period of time (at least 7 min)</td>
</tr>
<tr>
<td></td>
<td>Production: No opportunities for students to engage in a writing process</td>
<td>Production: Brief pieces of connected text (at least 3 min)</td>
<td>Production: Sustained opportunities within a particular genre or structure</td>
<td>Production: Sustained opportunities with attention to issues of writing craft, style or genre</td>
</tr>
<tr>
<td>ALL</td>
<td>Teacher does not introduce, define, or prompt use of academic terms</td>
<td>Teacher rarely introduce, defines, or prompt academic terms</td>
<td>Teacher introduces, defines and highlights academic language into instruction</td>
<td>Teacher consistently introduces, defines and highlights academic language. Students have multiple opportunities to use them</td>
</tr>
</tbody>
</table>

Note: IC = Intellectual Challenge. CD = Classroom Discourse. TBI = Text Based Instruction. ALL = Accommodations for Language Learning.

Intellectual Challenge (IC) considers whether the teacher academically challenges students in classroom activities. Aspects of differentiation concerns whether products the students are
asked to make engage them in analytic, inferential, or other “higher-level” thinking, or whether they are largely rote or recall. Additionally, there is the question of whether the students or the teacher are doing the majority of the intellectual work. For not making the instruction seem pointless to students, the teachers must provide tasks that can challenge each student. Those who are finishing tasks and assignments quicker than others, may end up with getting similar extra tasks, which can appear as demotivating (Kolberg, 2014). Therefore, the teacher can differentiate the IC by asking questions or giving assignments with different demands on analytical and inferential thinking. These demands can form the products where students are asked to show what they know, understand and can do.

Classroom Discourse (CD) captures the opportunities for student talk in the classroom, and the teacher’s uptake of students’ responses. In terms of differentiation, the question is whether the teacher offers opportunities for all the students to participate in classroom talk, either individually, in pairs or in groups, and the teachers’ uptake of the students’ responses. Since the English school subject is communicatively oriented (Ellis, 1997; Simensen, 2014), helping the students with oral production beyond their current ability is of utmost importance, not least because many are anxious to speak in class (Krashen, 1982). Without help, they may struggle with oral products.

Text-Based Instruction (TBI) is related to written products, both reading comprehension and written production in English in order to understand a text or a genre to develop the students’ English skills (Grossman, 2015). Differentiation of text-based instruction is essential to help students develop as readers and writers, and the question is whether I can observe teachers providing opportunities for individual students beyond what they can do on their own. In my MA thesis, identifying product and process differentiation in terms of disciplinary demand, means that I will observe whether teachers offer different students different intellectual challenges, or offer different students the opportunity to produce different products and conduction different activities, for example oral versus written, or variations of products and activities based on the individual student’s needs.

Accommodations for Language Learning (ALL) captures the teacher’s language support if the teacher provides accessible materials for students who struggle with developing their
English skills. In addition, the teacher might use academic language to help students learn topic-related vocabulary, by defining, introducing and repeating new terminology.

### 3.4.3 Step 3

The student responses from the questionnaire were punched into Excel where I could find the average scores for the groups. The questions from the questionnaires were categorised into the seven constructs: *Care, Control, Clarify, Challenge, Captivate, Confer,* and *Consolidate* (Tripod, 2015). See Table 3E.

*Care* contains questions to identify the relations between the student and the teacher, and to what extent the students experience the teacher to care about them. *Control* includes questions about the students’ views on how the teacher manages their behaviour, whether the teacher and students respect each other, and the teacher’s control of the classroom. These two categories are relevant in relation to the classroom environment. *Clarify* includes questions which measure whether the students experience the teacher’s explanations and instruction to be clear, and whether they believe the teacher helps them understand. *Challenge* concerns whether the students find the English instruction to be challenging enough. *Captivate* includes questions which identify whether the students find what they learn to be interesting, and if they are satisfied with the way of learning English. *Confer* measures whether the students experience sharing of thoughts and ideas in the classroom, and whether they believe the teacher listens to them. *Consolidate* measures whether the students experience that the teacher sums up the lessons and checks what they have learned, in addition to offering helpful comments on the students’ work. These five categories are relevant in relation to how the English instruction is carried out.

The questions were close-ended with a 5-points Likert scale with the response alternatives *never, rarely, sometimes, often* and *always*. In this way, there was no opportunity for the students to comment upon these options (Cohen et al., 2011). The students’ answers were anonymous, but were marked with the ability group they belonged to at the time of the video observations. With numbers in the questionnaires, the responses were clear (Cohen et al., 2011), and I found the average score for each category (care, control, clarify, challenge, captivate, confer, consolidate), and interpreted them. The results could help comparing the data from the questionnaires with the observed instruction.
**Table 3E.** The Tripod questionnaire: Norwegian version used in the LISE study. 41 questions using a 5-point Likert scale (from Agree to Disagree).

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| **Care** | - My teacher in this class makes me feel s/he really cares about me.  
- My teacher seems to know if something is bothering me.  
- My teacher really tries to understand how students feel about things.  
- My teacher understands that we may be tired, or that we have had a long day.  
- My teacher takes time to help each student. |
| **Control** | - Student behaviour in this class is under control.  
- *I hate the way that students behave in this class.*  
- *Student behaviour in this class makes the teacher angry.*  
- *Student behaviour in this class is a problem.*  
- My classmates behave the way my teacher wants them to.  
- Students in this class treat the teacher with respect.  
- Our class stays busy and doesn’t waste time. |
| **Clarify** | - If you don’t understand something, my teacher explains it another way.  
- My teacher knows when the class understands, and when we do not.  
- *When s/he is teaching us, my teacher thinks we understand when we don’t.*  
- My teacher has several good ways to explain each topic that we cover in class.  
- My teacher explains difficult things clearly.  
- *My teacher moves too fast through the material.*  
- *My English teacher uses Norwegian to help us understand.*  
- I find it easy to understand my teacher when he/she speaks English. |
| **Challenge** | - My teacher asks questions to be sure we are following along when s/he is teaching.  
- My teacher asks students to explain more about the answers they give.  
- In this class, my teacher accepts nothing less than our full effort.  
- My teacher doesn’t let people give up when the work gets hard.  
- My teacher wants me to explain my answers—why I think what I think.  
- In this class, we learn a lot almost every day.  
- In this class, we learn to correct our mistakes. |
| **Captivate** | - *This class does not keep my attention—I get bored.*  
- My teacher makes learning enjoyable.  
- My teacher makes lessons interesting.  
- I like the way we learn in this class.  
- My English teacher is a good language role model for the students. |
| **Confer** | - My teacher wants us to share our thoughts.  
- Students get to decide how activities are done in this class.  
- My teacher gives us time to explain our ideas.  
- Students speak up and share their ideas about class work.  
- My teacher respects my ideas and suggestions. |
| **Consolidate** | - My teacher takes the time to summarize what we learn each day.  
- My teacher checks to make sure we understand what s/he is teaching us.  
- We get helpful comments to let us know what we did wrong on assignments.  
- The comments that I get on my work in this class help me understand how to improve. |

*Note:* The questions in italics have a negative approach, which required me to turn the Likert-scale around on these questions in order to get the right results when finding the average score of each category.
3.4.4 Step 4
After the quantitative and qualitative analyses, I first compared the video data from School 3 with ability grouping with Schools 2 and 1, with random grouping. I then compared the video data to the survey data at School 3.

3.5 Research credibility
In this section, I will start by discussing the reliability and the validity of my MA study, prior to explaining what kind of ethical issues and privacy threats that can occur when using secondary video observation and questionnaire data.

3.5.1 Reliability
Bryman (2015, p.g 41) defines reliability as what “is concerned with the question of whether the results of a study are repeatable”. Reliability can be divided into inter reliability and intra reliability.

Inter reliability measures the agreement within numerous researches’ results (Hallgren, 2012). There are strict procedures to follow when observers are analysing their data using the PLATO protocol. To achieve an accurate scoring of the video data, all observers must have completed a PLATO-training program and be certified in using PLATO, which I am. In addition, 25% of the observed segments are coded by two certificated observers to strengthen the reliability. Concerning the questionnaires, the reliability is strengthened due to its equivalence where questions are asked in two different ways. In other words, one can test the reliability of the results by checking the connection between the students' answers to the different questions which test the same theory (Kleven, Hjardemaal & Tveit, 2014). In addition, both the PLATO manual and the Tripod questionnaire are thoroughly validated instruments.

Intra reliability measures to what degree there is an agreement among multiple repetitions of one test (Bryman, 2015). With video observations, the researcher has the opportunity to rewind the recordings and look several times at specific incidents in the classroom (Luff & Heath, 2012). It is possible to transcribe and discover details one could not have found when
being an observer in a classroom. In addition, since I am connected to the LISE project, I have been able to discuss my interpretation with researchers and students linked to LISE.

3.5.2 Validity

The validity in a study measures whether the researcher investigates what is supposed to be investigated (Brinkmann & Kvale, 2015). Further, Maxwell (2013, p. 121) state that the validity “depends on the relationship of your conclusions to reality, and no methods can completely assure that you have captured this.” In other words, a researcher’s perception of reality can be difficult to measure.

A common validity threat concerning video observations is reactivity, when participants’ awareness of being observed has an impact on their actions in front of camera (Wickström & Bendix, 2000). Researchers who went to the schools for recording the classrooms endorsed the students and the teacher to act as normal as possible for the purpose of collecting reliable data (Blikstad-Balas, 2016). Using the thoroughly validated PLATO manual, strengthened the accuracy of my video results, and I have compared the video observations and surveys to check the validity of one another.

As I chose to use a mixed methods approach, I have data from different perspectives that will help to explain one another, which provide a certain validity by itself (Creswell, 2014; Brevik, 2015). Triangulation was used by collecting two different data sources (video recordings and questionnaires) at the same time to answer the main research question. In this study, triangulation was used to achieve more accurate results (Kleven et al., 2014).

Using the thoroughly validated Tripod questionnaire strengthened the accuracy of my results. Researchers in the United States and Norway have already validated the questionnaire, and researchers in the LISA-project have tested the questionnaires in classes with mathematics and Norwegian. Further, the questionnaire is translated into Norwegian so there would be fewer misunderstandings by the students. Another issue is the potential lack of honesty when they fill out their responses. Also, they may not be interested in reading the questions carefully, so the responses will not reflect their real opinion. In addition, the students might interpret the questions differently (Creswell, 2014; Maxwell, 2013). Because there is a 5-
point Likert scale to use when responding the questionnaires, the students might also have different opinions of what the different choice of answers really means.

Finally, it is important to remember that this study is based on my interpretation of a small amount of collected data. Therefore, it is not my intention to generalise my research results to a greater population. Because I have used a purposive sampling approach where the sampling of participants is not random, the “purposive sampling does not allow the researcher to generalize to a population” (Bryman, 2015, p. 408). Internal validity can be found where there is resemblance between the observations and the theory and ideas of researchers (Bryman, 2015). Using Tomlinson’s differentiation model strengthens the internal validity of my data.

3.5.3 Ethics and privacy

There are ethical concerns that may arise between me as a researcher and the research participants, and Bryman (2015) brings up four ethical principles in research. The research shall not harm participants, the students shall receive and sign an informed consent form, there shall not be an invasion of privacy, and the researcher shall present the data as it is (Bryman, 2015).

My role as a completely independent observer gives me no opportunity to have contact with the participants of the study. Further, the teachers, the students, and their parents have given the LISE project their written voluntary consent to participate in the LISE project, and to give other researchers within the project access to the data. The ethical guidelines should be adhered in all areas (NESH, 2006). The materials from the schools linked to the LISE project are saved in a legal and proper manner, and can only be found on selected computers (Dalland, 2011). Further, the researchers who use the material need to sign a statement where one promises to not abuse the data, nor leak personal information (Dalland, 2011). All participants will remain anonymous.
4 Findings

In this chapter, I will present my findings. I have identified three patterns in the data material. First, I found that there was very little observable differentiation in English instruction at the schools with random grouping, while there was extensive differentiated instruction at the school with ability grouping (4.1). Second, I found that while content and product differentiation was emphasised in the random groups (4.1.1), differentiation in the ability groups mainly focused on the process and classroom environment (4.1.2). Third, in the ability groups, I found high student satisfaction concerning their English instruction, both for low- and high-ability students (4.2).

4.1 The differentiated English classroom

The main finding was the clear difference between the schools that used random grouping and the school that used ability grouping in the English lessons. At School 1, which used random grouping, there was no observable differentiation at all. In fact, the English instruction in these groups was directed at all the students in the same manner at the same time.

At School 2, however, the teacher differentiated her English instruction in one situation, when the students were asked to give oral presentations (lesson 4a and 4b). The students could choose whether to give their presentations in front of the whole class, in front of their group, or in front of the teacher only. As I will explain below (section 4.1.1), this choice suggested a differentiation of product and content.

At School 3, which used ability grouping, the English teacher differentiated her English instruction throughout the observed lessons, related to the entire learning process, which also to some extent included a differentiation of the classroom environment. The details of this differentiation will be elaborated in section 4.1.2. In table 4A, the topics for each lesson are presented:
Table 4A. Content covered in the English groups at Schools 1–3.

<table>
<thead>
<tr>
<th>Ability grouping</th>
<th>Random grouping</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>School 3</strong></td>
<td><strong>School 2</strong></td>
</tr>
<tr>
<td>Lesson 1a and 1b</td>
<td>Lesson 3a and 3b</td>
</tr>
<tr>
<td>Lesson 2a and 2b</td>
<td>Lesson 4a and 4b</td>
</tr>
</tbody>
</table>

**Content**

Interestingly, within each school, the content was identical for both groups. At School 1, all the students in both groups worked with the same cultural topic, in addition to grammar instruction. At School 2, all the students in both groups read and analysed a poem linked to a cultural topic, and gave oral presentations about the same overall topic (the USA). However, I identified one aspect of differentiation at School 2, as the students were allowed to choose individual texts in relation to this overall topic. I present more details in section 4.1.1 below.

In addition, the teacher gave a short grammar instruction, covering the same grammar aspects in both groups. At School 3, the school with ability grouping, the two groups read and analysed the same two short stories, aiming to understand the content. Even the vocabulary taught in all the groups at the three schools were the same.

**4.1.1 Occurrences of differentiation with random grouping**

As mentioned, I identified differentiation in the random groups in one situation only. This occurred at School 2, in connection with the students’ oral presentations. Based on

**Note:** The groups at each school are referred to as a and b. The lessons are referred to as 1-5. 1a = school 1, lesson 1 in group a. 1b = school 1, lesson 1 in group b. 2a = school 1, lesson 2 in group a. 2b = school 1, lesson 2 in group b. 3a = school 2, lesson 3 in group a. 3b = school 2, lesson 3 in group b. 4a = school 2, lesson 4 in group a. 4b = school 2, lesson 4 in group b. 5a = school 3, lesson 5 in group a. 5b = school 3, lesson 5 in group b.
Tomlinson’s (2014) model, the elements that addressed differentiation related to content and product.

**Content**

For their oral presentations, the teacher at School 2 gave the students the freedom to choose the content of their presentation. They could choose content relating to the media or the Native Americans, within the overall topic of the USA. Even though this was the only observable differentiation of content in any of the English lessons at the schools with random grouping, and the topics were not narrowed or adapted to individual students beyond their opportunity to choose themselves, it nevertheless represents one characteristic of the differentiated English classroom.

**Product**

When the students had their presentations, the teacher gave the students a further choice in terms of differentiation; choosing the oral presentation format and audience. In the video observations, the teacher assigned the students to levels 1, 2, or 3 for these presentations. Those on level 2 and 3 had the choice of either presenting in front of the whole class, in front of their group, or in front of the teacher only. The students on level 1 did not get this choice, and had to present for the entire class. Based on their oral proficiency as expressed in their presentations, that the students on level 2 seemed to be mid-ability students, and the students assigned to level 3 low-ability students. By offering this differentiation, the teacher at School 2 not only differentiated the product on the group level,

The differentiation was clearly directed at the individual student, as each student had to some extent an opportunity to choose how they wanted to show what they had learnt in their presentation about the content they preferred. The individual differentiation was also apparent in terms of letting some choose their audience (levels 2 and 3), while others were not given that choice (level 1). In addition, when some of the students gave presentations to the teacher only, the teacher wanted the remaining students to work with grammar tasks while she and those presenting were in the hallway.

These differences were a result of the teacher’s differentiation of the content and the product and by studying these situations in depth; I identified two elements that explained the
individual differentiation in more detail; the students’ intellectual challenges and the teacher’s uptake of the student’s answers (see Table 3D).

**Intellectual challenge**

Students in both groups at School 2 held presentations followed by related questions from the teacher, which were directly linked to each student’s presentation. The questions were of varying intellectual challenges, which also determine the students’ grades on the presentations. Therefore, the PLATO-element *Intellectual Challenge* (Grossman, 2015) could be linked to the curricular element *Product* (Tomlinson, 2014).

![Figure 4A](image_url)

**Figure 4A.** School 2: Intellectual challenge for the students in both random groups. *Note.* The scores in Figure 4A are based on the intellectual challenge measured in all four lessons at School 2 (3a+b and 4a+b), and as there was no observable differentiation in lessons 3a and 3b, the differences in the scores are directly linked to the presentations in lessons 4a+b. The percentages show the frequency of the types of questions represented by scores 1–4 (see Table 3D).

Figure 4A shows that none of the teacher’s questions were rote or recall (score 1). In addition, both groups have a score of 3 in 50% of the lessons, which means that the teacher asked questions that were mainly analytic, inferential or demanded the student’s inferences.
The main difference between the groups relates to the scores 2 and 4. In group A there were more rote and recall questions (33%) and fewer questions of the sophisticated high-level analytical and inferential type (17%). In group B it was opposite, the scores show that there were more questions for the students in group B which demanded sophisticated high-level analytical and inferential thinking (33%), than rote and recall questions (17%). These scores suggest that after the oral presentations, the teacher differentiated the questions at an individual level.

**Classroom discourse: Teacher uptake of student talk**

When it comes to the teacher’s uptake of the student talk, there was no observable differentiation between the groups in lessons 3a and 3b, but to some extent differentiation in lesson 4a and 4b. The teacher’s uptake relates to how she built on the student’s answers after the oral presentation (see Figure 4B).

![Figure 4B](image_url)

**Figure 4B.** School 2: Classroom Discourse: Uptake for the students in both random groups.  
*Note.* The scores in Figure 4B are based on the uptake measured in all four lessons at School 2 (3a+b and 4a+b), and as there was no observable differentiation in lessons 3a and 3b, the differences in the scores are directly linked to the presentations in lessons 4a+b. The percentages show the frequency of the teacher’s uptake represented by scores 1–4 (Table 3D).  

---

Note: This note is not a part of the natural text. It provides additional context for the data presented in Figure 4B.
The questions that the teacher asked her students were based on what the students had said in the presentation, and therefore the teacher’s uptake of student talk. Therefore, the PLATO-element Classroom Discourse, Uptake (Grossman, 2015) can be linked to the curricular element Product (Tomlinson, 2014). The differentiated questions connected to the student presentations gave an impact on the scores shown in the diagram (see Figure 4B). In group B, the teacher had a greater balance between brief responses (score 2) and higher-level uptake (score 3) than in group A, where the teacher’s uptake was expressed more as brief responses to the student’s answers, which did not include elaborative discussions or help the student to develop their answers.

Taken together, the differentiation observed in the random grouping, concerned a differentiation of content and product related to the oral presentations at School 2 only. This clearly planned differentiation was characterised by adapted questions of varying intellectual challenges and varying elaborations in the teacher’s uptake on the students’ answers. These findings contrast with the findings at School 3, with ability grouping.

4.1.2 Occurrences of differentiation with ability grouping

At School 3, where ability grouping was conducted, there was no observable differentiation in product and content, but clearly a differentiation related to the classroom environment and the learning process (Tomlinson, 2014). The differentiation was observed at both group level and individual level.

Content and product

In all the observed lessons at School 3, there is evidence that the students in both groups work with the same short stories. Therefore, there was no observable differentiation in content. Considering the product, both groups were told to hand in a written review about these short stories that they read in the groups. No differentiation of product was observed.

Environment

There was a big difference in the classroom environment between groups A and B. The students in group A sat in pairs with their learning partner in both lessons and worked silently while they read short stories and answered tasks linked to the texts. However, in group B’s first lesson, the classroom was organised with all the students (except two) sitting in a
literature circle together with the teacher. Towards the end of lesson 1, the teacher told the two students who did not participate in the literature circle that she was sorry for the lack of teachers; indicating that there were normally more than one teacher present in group B. This was confirmed in lesson 2, where group B had an assistant present. A small group of three students sat together with the assistant. The video recordings gave no evidence of what they were doing and there was no evidence of individual differentiation for the three students, but they were not following group B’s English instruction or activities. After 17 minutes, this small group walked out of the classroom with their assistant, to use a group room. Because group B is divided into even smaller groups, there was not only differentiation at group level, but also differentiation at an individual level.

Based on Tomlinson’s (2014) differentiation model, teachers might differentiate their instruction to create a good tone or climate in the classroom, which is what I observed. When it comes to the mood in group A’s English lessons, the teacher created an environment where the students sat quietly, and there were almost no incidents where students talked about topics unrelated to the English subject. In contrast, for group B, the teacher focused on creating an active classroom environment where the students had plentiful opportunities to join a literature circle with an oral discussion forum. Additionally, when there were students who did not want to participate in the literature circle, the teacher accepted their wishes if they instead wanted to work silently by themselves.

The teacher seemed to focus on creating a classroom environment which promoted a positive mood to prevent negative situations, such as this example, where two students argued in Norwegian about non-relevant topics (the quote is taken from the original transcription, and the names are pseudonyms. See Appendix 1 for English translation):

*Christopher:* [in an annoyed tone of voice to another student] La meg være i fred!

*Jenny:* [in an ironic tone of voice] Du er så snill!

*Christopher:* Ja og la meg være i fred!

*Teacher:* What’s up, Christopher, what’s up?

*Christopher:* Nei, de plager meg! De irriterer meg.
"Jenny: Det er han som drar stolen.

Christopher: Oj, for jeg ha’kke lov å ha beina mine her? Mener du det? Jeg kan’ke ha beina mine der?

Teacher: Stop please. Alright, have you discussed a little bit?

Christopher: Ahm, yeah.

Teacher: What you know about lotteries?

This conversation illustrates how the teacher responded to this unwanted student behaviour in group B. Throughout the observed lessons in group A, there was no need to respond in the same manner, simply because the environment was quiet and the students behaved respectfully towards each other.

Process
While there was no difference in the process between the groups at the schools with random grouping, the majority of the differentiation observed in the English instruction at School 3 with ability grouping did in fact relate to the learning process. Although there were some similarities between the groups, in terms of the teacher using English only and the students having a learning partner to discuss with, the differences were bigger than the similarities, both between and within the groups. This finding suggests that the teacher differentiated her English instruction for the individual student. In the following, I present my findings for lessons 1 and 2 separately.

Lesson 1
Table 4B illustrates the learning process in group A, where the teacher differentiated at individual level by giving an extra task to the students who finished the questions quickly. In addition, when the students worked individually with the tasks, the teacher helped them individually to understand difficult words.
Table 4B. Ability group A (School 3, Lesson 1a): An overview of the activities

<table>
<thead>
<tr>
<th>Group A (high-ability students)</th>
<th>Activity</th>
<th>Teacher instruction</th>
<th>Student activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00-03:30 (3 min, 30 sec)</td>
<td>Introduction and goal of lesson</td>
<td>Presenting orally to the group</td>
<td>Listening</td>
</tr>
<tr>
<td>03:30-38:00 (34 min, 30 sec)</td>
<td>Reading short story 1, doing questions 6-12</td>
<td>Walking around in the group, handing out additional task (writing a formal letter)</td>
<td>Reading individually, writing down the task answers</td>
</tr>
<tr>
<td>30:00-38:00 (8 min)</td>
<td>Individual work with additional task to short story 1 (writing a formal letter)</td>
<td></td>
<td>Writing down some of the answers individually</td>
</tr>
<tr>
<td>38:00-43:00 (5 min)</td>
<td>Summing up questions 6-7</td>
<td>Leading the discussion</td>
<td>Discussing in the group</td>
</tr>
<tr>
<td>43:00-60:00 (17 min)</td>
<td>Summing up questions 8-12</td>
<td></td>
<td>Discussing with learning partner, then in the group</td>
</tr>
<tr>
<td>59:30-60:00</td>
<td>Summing up the lesson</td>
<td>Closing the lesson</td>
<td>Discussing with learning partner</td>
</tr>
</tbody>
</table>

Table 4C illustrates the learning process in group B, where there was a differentiation at the individual level when the teacher accepted the two students who sat outside the circle not to join the literature circle. Those who wanted to work individually, were allowed to do that.
Table 4C. Ability group B (School 3, Lesson 1b): An overview of the activities

<table>
<thead>
<tr>
<th>Group B (low-ability students)</th>
<th>Activity</th>
<th>Teacher</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00-04:00 (4 min)</td>
<td>Introduction and goal of lesson</td>
<td>Presenting orally to the group</td>
<td>Listening</td>
</tr>
<tr>
<td>04:00-07:30 (3 min, 30 sec)</td>
<td>Summing up the first paragraph of short story 1</td>
<td>Asking students questions</td>
<td>Answering the questions orally</td>
</tr>
<tr>
<td>07:30-13:30 (6 min)</td>
<td>Arranging the literature circle</td>
<td>Organising the circle</td>
<td>Moving</td>
</tr>
<tr>
<td>13:30-54:00 (40 min, 30 sec)</td>
<td>Reading short story 1, do questions 3-9</td>
<td>After each paragraph, the teacher sums up, explains difficult words and discusses the questions</td>
<td>Two students: Reading silently and individually The rest: Reading aloud in a literature circle, discussing the text and answering the questions orally</td>
</tr>
<tr>
<td>54:00-56:30 (2 min, 30 sec)</td>
<td>Discussing question 10 in pairs</td>
<td>Discussing with a student</td>
<td>Discussing in pairs (not with learning partner) in the literature circle</td>
</tr>
<tr>
<td>56:30-60:00 (3 min, 30 sec)</td>
<td>Discussing question 10 out loud in the literature circle</td>
<td>Leading the discussion and making sure students understand short story 1. Telling what the students are going to do in the next lesson</td>
<td>Joining the discussion and listening</td>
</tr>
</tbody>
</table>

Introduction and goal of lesson (groups A and B)
As illustrated in Tables 4B and 4C, the biggest differences at group level in lesson 1, concerned the learning process. First, the teacher presented the goals for lessons 1a and 1b, which gave an impact on how the teacher organised the English instruction and the time spent on each activity. The teacher explicitly told the students in both groups about the lessons’
learning objectives and English goals, introduced the classroom activities and explained why the it was relevant for the students to achieve these.

The teacher told both groups that the goal was to have a good understanding of short story 1. In addition, she told group B that their goal was to finish reading the text; indicating that the main goal for group B included an activity the teacher took for granted that group A would have managed to achieve before the lessons started. In contrast, she told group A that it was important to finish the questions so they could discuss the answers at the end of the lesson, while this was not a requirement for the students in group B.

Although the students in both groups were given the same questions to short story 1, the students in group A spent less time on each question and had more time to discuss the questions linked to the short story at the end of the lesson. In addition, the teacher told group A:

I know that some of you have already finished the whole text and the questions [...] I have a new task for you that you can work with during this class, and the rest of you will have to finish reading your text and answer the questions.

This instruction indicates that there is differentiation at individual level in group A, as the teacher offered an additional task to the students who finished the questions. Most of the students started working on this new task, where they were asked to write a formal letter, and several of the students in group A managed to finish writing it. The teacher did not give this task to any of the students in group B, which indicates a differentiation at group level as well. The message from the teacher in the quotation above also signifies that the students in group A had worked with the text in advance, unlike the student in group B.

To gain a deeper understanding of the differences in the process of instruction between groups A and B at School 3, I will now present the activities in chronological order.

**Reading short story 1 (group A)**

Group A’s first activity was to work individually with the questions linked to short story 1, and they started after about 3 minutes and 30 seconds. Several students asked for the new task and after minute 32, the first student was done with the additional tasks. 38 minutes into class, the teacher wanted the students to sum up questions 6 and 7 as the previous questions were already discussed. After five minutes of discussing out loud in the group, the students
discussed questions 8, 10, 11 and 12 in pairs prior to discussing them in class. In other words, group A had the opportunity to write down the answers, discuss the answers in pairs, then discuss the answers with the entire group. These activities aligned with the expressed purpose.

**Reading short story 1 (group B)**

Group B spent more time on each activity than group A. Group B started the lesson with the teacher and the students together summing up the first paragraph of short story 1. Some students already sat in a literature circle, which indicated that there was a normal procedure to use literature circles in this group. All the students were told that after the reading, they were individually going to do the questions which to the short story. The literature circle expanded as more students wanted to read short story 1 out loud, and not for themselves, a choice that indicated a differentiation of the learning process for the individual students. Only two students wanted to work individually, outside the literature circle.

After 13 minutes and 30 seconds, the students in group B were ready to start reading the short story aloud, as their first activity. Each student had the choice to either read aloud or simply listen. After each paragraph, the teacher summed up what they had read and asked questions as to the students to make sure they understood. An example is provided below (the quote is taken from the original transcription, and the names are pseudonyms):

- **Thomas**: eeh, but the sun was right on her face now, in all it’s glory. It would… it would be a shame to get up at this minute, just while it was like this. She would lie and enjoy it for a minute or two longer. Eh, Martha woke with… with a start. How, eh, tiresom.
- **Teacher**: Tiresome
- **Thomas**: Tiresome. She must have dosett [dozed] off, and now would have to hurry to get everything done before that woman arrived. Ehm. She climbed stiffly out of bed and fumbled ab-about, ehm, for her dress. Where could it have got to, then she remembered; of course. She had to sit quite still on the edge of the bed for a bit in the mornings, then things sort of straight…
- **Teacher**: Straightened
- **Thomas**: Straightened, ehm, themselves out.
  
  [Student reads out loud in literature group]

  **Student** reads out loud in literature group

  [Student reads with a Norwegian accent; having problems with pronunciation]
**Teacher:** Ok, very good. Alright, so what happens in this passage? What’s the situation now? What happens?

[Students are silent]

**Teacher:** “I’ll show them”....then what happens? “I'll show her”, she says..or thinks..Michael?

In this sequence, the teacher helped the student (Thomas) with difficult words during his reading, and commented quickly on his reading, saying, “Ok, very good”. Furthermore, she asked summarising rote and recall questions, such as “What happens in this passage?” and “What’s the situation now?”. Since the teacher chose to ask these questions in order to ensure reading comprehension among these students, group B spent more time than group A reading short story 1.

For group B, they managed to finish reading the text, during lesson 1, in addition to discussing questions 3-10, although the lesson ended with nothing written down. At the beginning of the lesson, the teacher stated that she had planned for group B to work almost in the same way as group A, with reading first, and then answering the questions linked to the text. Nevertheless, during group B’s lesson, the teacher decided to make a change in the activities, and the learning process in the two groups were quite different, which suggested a spontaneous process differentiation. The goal of the lesson was completed for group B as well.

Lessons 1a and 1b ended differently. At the end of group A’s lesson, the teacher’s last words were:

Ok, thank you very much everybody. Now I think we will have to stop, but what you can do now is to turn to your learning partner and say in English what you have understood about the text in only three sentences. Ok, can you do that? Just to sum up the class? And thank you very much everybody, you've been really good.

In group B, however, there was no need for the students to sum up the lesson with the learning partner, as they had already worked together throughout the lesson. Instead, the teacher asked the students a close-ended question: “Do you feel that you have a quite good understanding of the text now?”. In addition, the teacher informed the students about a new text they were going to read:
So, next week, we will read another text, and I would like you to be able to compare those two texts. That’s when we have to analyse a bit, from different angles, to understand it well.

With this message, the students would be prepared for their next English lesson.

**Lesson 2**

In lesson 2, the biggest difference of the process between the groups, was the use of time at each activity. Differentiation in process might be used to offer some students more or less time on a task compared to other students, or the teacher might spend more time explaining aspects of the English subject to one student group than to another. I will now sum up the activities of each group, and tell when they were conducted.

**Introduction (groups A and B)**

There was an observable differentiation at group level in lesson 2 as well. In group A, the introduction of the lesson contained brief information about the plan for the lesson and a reminder of a text review they were going to hand in. Further, they discussed the term “cruelty” and started with some discussion topics. Group B started lesson 2 differently, with the teacher introducing the word “cruelty” prior to giving an introduction of the plan for the lesson. When the teacher gave this information, introduced a new discussing theme or a new activity, more time was spent on this purpose in group B than in group B.

In group A, the teacher spent less than a minute reminding the students and giving information about the written review they were going to hand in the following week. Some students in group A had already handed in the review. In group B, the teacher spent five minutes informing the students about the same review, because of all their questions related to the assignment. The excerpt below is an example from the dialogue the teacher had with the students in the beginning of lesson 2b (the quote is taken from the original transcription, and the names are pseudonyms. See Appendix 1 for English translation):

**Teacher:** I just want you to remind you a bit before we start that you have a text review to hand in. […]

**Michael:** Kan jeg gjøre det i denne timen istedenfor?

**Teacher:** No, you can’t, I’m sorry. So, you may hand it in as soon as you have done the text review […] and if you want to hand in the text review of
[title of short story 1] today or tomorrow, you can do it. Whenever you want, in fact […]. The deadline is the end of next week. Yes, Thomas?

**Thomas:** Når skal vi levere forrige oppgaven?

**Teacher:** Excuse me?

**Thomas:** Ehm, when do we hand in the last oppgave or ah

**Teacher:** This text review? If you have… if you want to do it now, today or tomorrow, if you have done it, you can hand it in. Ok? Right? So…

**Sebastian:** [Title of short story 1], ække det…hand it in next week?

**Teacher:** You can hand it in the next week if you haven’t… if you want to have the choice, and you want to wait until you’ve read [title of short story 2], you can hand it in next week. Maybe we can have some time during class as well to, ahm, to work on that one.

**Michael:** Jeg har kommet ganske langt på den [name of short story 1], så er det greit i denne timen at jeg bare fortsetter på den?

**Teacher:** We’re going to…

**Christopher:** Nei, vi skal lese den

**Teacher:** We’re going to do some activities all of us here and we’re going to speak together and discuss so, ahm, I’m sorry about that

**Michael:** Må jeg lese [unclear]

**Teacher:** […] Yes, we will at least start it today and we will continue the next time. But if we have… if we can manage to have some time in one of the lessons next week, we can maybe work a little bit on the text reviews as well. Is that fine?

**Michael:** Yes

**Teacher:** Yes, but you need to do something at home too. And it’s really good that you have started, Michael, that’s very good. Yeah?

**Michael:** Men når skal den leveres på søndag?

**Teacher:** I said, well I put Sunday because I thought that if you finished it now, if you finish it now, then you can have time to do something else next week. Because you have…

**Michael:** Men hvis jeg gjør den ferdig denne timen

**Teacher:** But not this..

**Christopher:** [in a frustrated tone of voice] Du kan ikke gjøre det for vi skal gjøre noe annet!!!

**Teacher:** Sh, sh, sh Christopher, please.

As shown in this extract, the teacher was interrupted several times by the students asking similar questions. This conversation indicates that the teacher did not give clear instructions and/or that her students did not pay attention while she was talking. Additionally, the students spoke Norwegian, which might indicate that they struggled with information given in English and that they might not have understood what the teacher said.
Reading short story 2 (group A)

Table 4D illustrates the learning process in this second English lesson in group A. As in lesson 1a, the teacher helped the students individually with understanding difficult words, in addition to introducing new terms to the whole group.

Table 4D. Ability group A (School 3, Lesson 2a): An overview of the activities.

<table>
<thead>
<tr>
<th>Group A (high-ability students)</th>
<th>Activity</th>
<th>Teacher</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00-06:30 (6 min, 30 sec)</td>
<td>Introduction</td>
<td>Reminding the students about a written review they were going to hand in. Giving students discussion topics from a power point.</td>
<td>Listening</td>
</tr>
<tr>
<td>06:30-13:30 (7 min)</td>
<td>Discussing in pairs, then summing up out loud in class</td>
<td>Walking around and listening to students. Leading the discussion</td>
<td>Participating in the discussion</td>
</tr>
<tr>
<td>13:30-20:30 (7 min)</td>
<td>Making mini mind map about short story 2</td>
<td>Walking around and checking students’ work</td>
<td>Making mini mind maps</td>
</tr>
<tr>
<td>20:30-26:30 (6 min)</td>
<td>Comparing mini mind maps then summing up out loud in class</td>
<td>Leading the discussion. Starts a new discussion topic</td>
<td>Comparing mini mind maps, participating in the discussion</td>
</tr>
<tr>
<td>26:30-41:30 (15 min)</td>
<td>Introducing short story 2, reading the first paragraph, then answering questions 1-3 linked to the first paragraph</td>
<td>Introducing short story 2, walking around in class while they answer questions 1-3</td>
<td>One student reads the first paragraph aloud while the others listen. Students discuss in pairs and write answers to questions 1-3</td>
</tr>
<tr>
<td>41:30-46:00 (4 min, 30 sec)</td>
<td>Summing up</td>
<td>Leading the discussion</td>
<td>Participating in the discussion</td>
</tr>
<tr>
<td>46:00-55:30 (9 min, 30 sec)</td>
<td>Reading rest of short story 2 and answering question 4-8</td>
<td>Walking around and checks students’ work</td>
<td>Reading short story 2 and write answers to question 4-8</td>
</tr>
<tr>
<td>55:30-60:00</td>
<td>Spontaneous writing</td>
<td>Introducing the activity</td>
<td>Writing spontaneously about their impression of short story 2</td>
</tr>
</tbody>
</table>
Reading short story 2 (group B)

Table 4E illustrates the learning process in this second English lesson in group B. In this lesson, there was differentiation at the individual level, as group B was divided into two smaller groups, where there was an assistant teacher present. Some vocabulary was taught individually to the students, but important vocabulary, such as “cruelty” was introduced in front of the whole group.

Table 4E. Ability group B (School 3, Lesson 2b): An overview of the activities.

<table>
<thead>
<tr>
<th>Group B (low-ability students)</th>
<th>Activity</th>
<th>Teacher</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00-11:30 (11 min, 30 sec)</td>
<td>Introduction</td>
<td>Teaching a new vocabulary. Reminding the students about a written review they are going to hand in. Giving students discussion topics from a power point.</td>
<td>Listening and asking questions about the text review</td>
</tr>
<tr>
<td>11:30-24:30 (13 min)</td>
<td>Discussing in pairs, then summing up out loud in class</td>
<td>Walking around and listening to students. Leading the discussion</td>
<td>Participating in the discussion</td>
</tr>
<tr>
<td>24:30-29:30 (5 min)</td>
<td>Making mini mind map about short story 2</td>
<td>Walking around and checking students’ work</td>
<td>Making mini mind maps</td>
</tr>
<tr>
<td>29:30-36:30 (7 min)</td>
<td>Comparing mini mind maps then summing up out loud in the group</td>
<td>Leading the discussion. Starting a new discussion topic</td>
<td>Comparing mini mind maps, participating in the discussion.</td>
</tr>
<tr>
<td>36:30-46:30 (10 min)</td>
<td>Discussing “Cruelty in today’s society”</td>
<td>Walks around in class. Then she leads the discussion</td>
<td>Discuss in pairs, prior to discuss out loud in the group</td>
</tr>
<tr>
<td>46:30-60:00 (13 min, 30 sec)</td>
<td>Introducing short story 2. Reading the first paragraph, then answering question 1-3 linked to the first paragraph</td>
<td>Giving hints of what to think about while reading the first paragraph. Leading discussion.</td>
<td>One student reads the first paragraph aloud while the others listen. Discussing question 1-3 out loud in the group</td>
</tr>
</tbody>
</table>
**Reading short story 2 (groups A and B)**

After the 6 minutes of introduction, the students in group A were going to discuss what they knew about lotteries and if they had ever won something in a lottery. The students in group B discussed the same questions after 11 minutes. With these questions, the teacher linked the students’ prior knowledge to new learning objectives. Differentiation occurred when the teacher explicitly built on the students’ prior academic knowledge to develop their skills and understandings in order to meet the lesson’s goals and advance the students’ learning and development. As the students in both groups discussed the same questions in the beginning of class and the activities for the rest of the lesson were already planned, there was no observable differentiation considering this feature of instruction.

Furthermore, group A’s first activity in written form was to make a mini mind map, and it started after 13 minutes and 30 seconds. Group B started the same activity after 25 minutes. 29 minutes into group A’s English lesson, one of the students read the first paragraph of short story 2 aloud in the group. The same activity started in minute 49 in group B. This finding indicated that the students in group B needed more time to understand the procedures, and therefore, the teacher spent more time explaining the tasks for them, which is another indication of differentiation for the students in group B. Throughout the lesson, it became evident that the students in group B did not manage to do all the questions linked to short story 2, unlike group A, but the teacher encouraged them to do as many as possible; saying that, “We can take this orally now because we’re running out of time, we’re a little bit late”.

Finally, the teacher closed lessons 2a and 2b differently. In group A, the students’ final activity included a sequence of spontaneous writing for two minutes in which the students were going to write down their impression of short story 2. Group B’s final activity was an oral discussion of the questions linked to short story 2, and there was no summary in the group concerning this activity.

**Lesson 1 and 2**

Looking at the process of instruction in both lessons (1a, 1b and 2a, 2b), my findings show that the differentiation between the two ability groups was prominent, particularly considering four elements from the PLATO manual (Grossman, 2015); (1) the intellectual challenges the teacher demanded from the students, (2) the opportunities for student talk, and
the teacher’s uptake in terms of her responses to such talk, (3) the use and production of texts, and (4) the use of academic language. Here, the PLATO-element Intellectual Challenge (Grossman, 2015) could be linked to the curricular element Process (Tomlinson, 2014).

**Intellectual challenge**

Across the two English lessons (1a, 1b and 2a, 2b), the same questions linked to the two short stories were conducted in both groups, and the same discussion topics were also introduced in both groups, such as “Where can we find cruelty in today’s society?”. Figure 4C shows that none of the segments only contains rote or recall questions (score 1). In addition, both groups have a score of 2 for 50% of the questions and the discussion topics in both groups, which were mostly rote or recall combined with some extent of analytical thinking by the students. The main difference between the groups relates to the scores 3 and 4, which means that the students in both group A (50%) and group B (37.5%) were engaged in analytical thinking and were asked to make inferences. However, towards the end of lesson 1b, the teacher asked the students in group B some questions which required sophisticated analytic and inferential thinking at a high level (score 4). Therefore, 12.5% of the questions in group B received the score 4. Somewhat surprisingly, there was no evidence of these types of questions among the high-ability students in group A (see Figure 4C).

![Figure 4C](image-url)

**Figure 4C** School 3: Intellectual challenge for the students in both ability groups. *Note.* The percentages show the frequency of the types of questions represented by scores 1–4 (see Table 3D).
Classroom discourse: Opportunities for student talk

Another detail concerning the differentiation of the learning process in the ability groups at School 3, relates to the students’ opportunities to talk in their groups. Figure 4D illustrates that there was an observable difference between these ability group’s oral participation in their English lessons. As mentioned, both groups at School 3 worked with the same short stories and the same questions. However, while students in group A worked individually and silently, group B read and discussed the short stories orally. At the beginning of lesson 1, and the end of lesson 2, the students in group A sat quietly and read short stories in addition to answering questions in the written form. Therefore, there were few opportunities for student talk among these students, which is why 37.5% of the opportunities for student talk are scored low (score 1). Furthermore, 37.5% of group A’s English instruction received score of 2 (occasional opportunities for student talk), and 25% of the instruction received score of 3 (opportunities for student talk for at least a third of the lesson).

Interestingly, there were more opportunities for student talk in group B, and the observed instruction has an equal distribution of score 2 and 3 (50% each). Because the teacher used several minutes of the instruction to talk, and since reading aloud is not seen as an

Figure 4D. School 3: Classroom Discourse: Opportunity for students talk in both ability groups. Note. The percentages show the frequency of the students’ opportunity to talk during the English lessons, represented by scores 1–4 (see Table 3D).
opportunity for student talk according to the PLATO-manual, none of the lessons at School 3 received the score of 4.

**Classroom discourse: Teacher uptake of student talk**

Together, Figures 4D and 4E illustrate that there was in general a higher oral activity in group B than in group A at School 3. In 12.5% of the lessons in group A, when there was no classroom discourse, there was also no teacher uptake in terms of responses to the student’s ideas, and the score is therefore absent (score 1) for 12.5% of the lessons and low (score 2) for 25% of the lesson, although there was a brief teacher response to a student’s ideas. The teacher’s uptake makes a major difference concerning the differentiation of the learning process in these ability groups. While group A scored 3 for 62.5% of the lessons, group B’s instruction had an overall score of 3 throughout their English lessons. This means that in 100% of the instruction in group B, there was a balance between brief responses and a higher-level uptake of students’ ideas by the students or the English teacher.

![Graph](image.png)

**Figure 4E.** School 3: Classroom Discourse: Uptake for the students in both ability groups.

*Note.* The percentages show the frequency of the teacher’s uptake represented by scores 1–4 (Table 3D).
Here is an example from lesson 1b showing how the teacher responded (uptake) to and expanded on the students’ ideas and knowledge:

**Teacher:** Now do you remember, anyone, what this text was about? How did it start, who is the main character and so on? And how was this main character? You remember that? Who can tell me that? It’s called [name of short story 1]. You remember? Lisa

**Lisa:** Eh, the main character’s name is [name of character 1]

**Teacher:** Yes, can you say anything more about her?

**Lisa:** She was really caring she, ehm, was thoughtful

**Teacher:** Yes, we found out that it was a very caring, thoughtful, nice woman, wasn’t she? Yes. How old was she? You want to say something else, Eva?

**Eva:** Yeah, wasn’t her, like, full name [name of character 1]?

**Teacher:** Yes, her name was [name of character 1]. Ahm. How old is [name of character 1]? Who can tell me that? Jonas?

**Jonas:** Eh, 90… 90 years old

**Teacher:** Yes, she is 90 years old. So, she is an old woman. In the beginning of the text, where is she? Where is [name of character 1] in the beginning of this story? Michael

**Michael:** In her bed

**Teacher:** She was in her bed, yes. Was she alone?

**Michael:** No

**Teacher:** Was she alone in her bedroom? Lisa

**Lisa:** She was with her husband, [name of character 2]

This was a summarising conversation to make sure the students have understood the beginning of short story 1. Additionally, the discussion was elaborative in which it included brief responses from the teacher, and intended to be a help for the students to gain a greater understanding for the rest of the text.

**Text-based instruction: Use of texts (reading)**

Figure 4F illustrates that even though both groups at School 3 read and analysed the same short stories, group A had a more active use of the texts to gain a wider understanding of them (score 3) in 62.5 % of the observed English instruction, while group B has the same score in 25 % of the English lessons only. In 12.5 % of the lessons in group A, there was no use of texts (score 1). In general, group A worked more efficiently with the short stories, had
more opportunities to use the text to find evidence for the tasks about the text, and was able to use them more actively (score 3).

In group B, however, 37.5% of the text-based instruction received the score 1, indicating that their talk about the text was a more prominent activity, which means that they did not use the text as actively as group A. The scores between the groups also differ because the time spent to introduce new activities differed between the two groups. For instance, in group B, the teacher spent more time talking about the review they were going to write, explaining what they were to do, instead of talking about the short stories. Additionally, group B spent more time on organising the classroom and discussing different vocabulary, which resulted in less time to actively use the texts. The remaining time in the English lessons at School 3 received a score 2 for use of texts, which indicates that there were sequences with merely references to details in the texts.

Figure 4F. School 3: Text-based instruction: Use of text (reading) for the students in both ability groups. Note. The percentages show the frequency of the student’s use of texts as represented by scores 1–4 (Table 3D).

This observed difference between the groups does not mean that the instruction in group B was of lower quality, but it explains the differentiation between the two groups concerning how to understand the content. While the teacher planned that group A were able to work individually with the texts and the tasks, group B needed more support from the teacher in
their comprehension process (Figures 4D and 4E), which resulted in more opportunities to talk about the text and less individual text-based work.

**Text-based instruction: Production of texts (writing)**

A second element related to text-based instruction, that contributes to understanding how the teacher in the ability groups differentiated the English instruction, concerns production of texts. First of all, one should keep in mind that Tomlinson’s (2014) curricular element *product* only concerns culminating or summative products like texts, tests, presentations and projects, and not smaller tasks the students answer during a lesson. So, since such texts were not written in any of the groups, any production of text at School 3 can only be connected to the *process* of instruction, and not the *product*.

One of the biggest differences between groups A and B at School 3 lays in the element of Text-Based Instruction, Production of texts. Since group A answered the questions linked to the short stories in written form and group B answered them orally, the production of text only occurred in group A and not in group B. Figure 4G demonstrates that there were no opportunities for the students in group B to engage in a writing process, and therefore the overall score is therefore 1 (100%).

In contrast, group A has scored 1 in 37.5 % of the English lessons, because they also had some oral activities during their English lessons. Figure 4G further shows that there were several opportunities for the students in group A to produce text, as 25% of the lessons contained production of brief pieces of connected text for at least 3 minutes (score 2). In addition, group A had sustained opportunities with attention to issues of the writing craft, style and genre in 37.5 % of the observed instruction, hence the score 4. The teacher further differentiated the writing process when group A did an additional task (writing a formal letter), linked to short story 1, which group B was not asked to do at all. This activity resulted in the score 4 in lesson 1a, where it was conducted, and understandably a score of 1 in lesson 1b where writing was not conducted.
Figure 4G. School 3: Text-based instruction: Production of text (writing) for the students in both ability groups. Note. The percentages show the frequency of the student’s production of texts as represented by scores 1–4 (Table 3D).

Accommodation for language learning: Use of academic language

Figure 4H shows the final element of differentiation that I observed in the ability groups at School 3. For 25% of the English lessons in group A, and 12.5% of the time in group B, in addition to 63% of the time in both groups, the teacher never (score 1) or rarely (score 2) introduced, defined, or prompted the use of academic terms. This is somewhat surprising for English lessons, since a certain focus on vocabulary would be expected. To receive a score of 3, the teacher must introduce, define and highlight academic language into the instruction, which occurred more often in group B (25%) than in group A (12.5%).

During the lessons, especially in lesson 1, group B needed the teacher to give definitions and introduce new terms more often than in group A. Therefore, the higher percentage of score 3 in group B’s instruction suggests differentiation of the comprehension process by offering terminology and using these during the literature circle activity.
School 3: Accommodation for language learning: Use of academic language for the students in both ability groups. **Note.** The percentages show the frequency of the teacher’s and the students’ use of academic language as represented by scores 1–4 (Table 3D).

During the oral discussion in the literature circle in lesson 1b, the teacher introduced new vocabulary several times, taken directly from the short story. She asked for instance, “What’s a *chest of drawers*?” and, “What is it to be *wrinkled*?”. Interestingly, in lessons 1a and 1b, one difference in the accommodation for language learning was that the teacher taught new vocabulary mostly at an individual level in group A, talking directly to the students while they were reading individually, and mostly at group level in group B, explaining new words to the entire group during the literature circle.

**4.1.3 Summary**

In this section, I have aimed to answer my first research question: *What characterises differentiation provided in English lessons using random grouping and ability grouping?* To summarise my findings from the video recordings, I want to highlight the clear notion of differentiation at the school with ability grouping, and that this differentiation was found in the *process* of instruction and in the classroom *environment*. In the group with lower-ability students, the teacher focused on the discussion about the text, having an oral communication to gain a good understanding of the texts they were reading, while the group with higher-
ability students, the teacher focused on the students’ working with the texts individually and in written form.

As the differentiation was prominent at the school with ability grouping, the schools with random grouping had a less visible differentiation between the groups. At one of the schools, there was no observable differentiation at all, and at the other school, there was differentiation of the content and product related to the students’ oral presentation. Since the clearest differentiation was identified in the ability grouping, and since there is a certain scepticism in the literature concerning ability grouping (e.g., NOU2016:14), I found it to be important to consider the students’ own experience of their English teaching at this school.

4.2 Findings from the questionnaires

In order to identify the students’ experiences with their English instruction, I looked at the responses in the questionnaire, for the students in the ability groups. This analysis was possible since the students at School 3 had all their English lessons in these groups.

I summarised the scores for all the students in and compared the average scores on all 41 questions for each ability group. The aim was to identify to what extent they were satisfied, or if there were any dissatisfaction linked to the students’ English instruction. The questionnaire captures students’ opinions on seven constructs concerning their instruction; (1) control, (2) clarify, (3) consolidate, (4) care, (5) challenge, (6) confer, and (7) captivate. These areas are explained in Table 3E, and they can be almost impossible to observe on video. These student experiences will therefore support my interpretations of the video data.

Interestingly, the questionnaire revealed that the students in both ability groups were largely satisfied with their English instruction; on a scale from 1 to 5, their average scores ranged from 2.97 to 3.96, with a mean value of 3.54. However, there were some differences between the average scores in groups A and B, and these are provided in figure 4I.
Figure 4I. Student experiences related to their English instruction. Note. Group A = High-ability grouping. Group B = Low-ability grouping. Note. The 41 questions are organised into the seven C’s, and the scores are from 1-5 (disagree-agree). See Table 3E.

Surprisingly, the overall results from the questionnaire show that the low-ability group (group B) has more positive experiences from their English instruction than the high-ability group (group A). This finding concerns six of the constructs. However, one of the constructs, control, scored slightly higher in group A (3.96) than in group B (3.72). According to the questionnaire, this suggests that the high-ability students (group A) reported slightly higher respect for the teacher and that they experienced good student behaviour in the classroom. This is also the case in group B, but to a somewhat smaller degree. This finding supports my interpretation of the classroom environment from the video data.

Furthermore, for the construct clarify, Figure 4I suggests that the students in group B are more satisfied than group A with the teacher’s clarifications in the English instruction. This is in line with my video observations, where there were several evidences of the teacher spending more time in group B to introduce the topic and explain the tasks and terminology in the English instruction.
The construct *consolidate* concerns whether the students feel the teacher summarises the objectives for the group, and whether they receive constructive feedback on their work. These features of instruction can help students progress their English skills, and the questionnaire reveals that while all the students seem satisfied with the teacher’s consolidation, the low-ability students (group B) give a higher average score, which supports my video analyses, which indicate that the teacher spent more time summarising and commenting on the students’ work in group B.

Interestingly, the students’ responses to the construct *care* show that the low-ability students (group B) feel that the teacher cares for them and takes time to help them during the English lessons to a higher extent than what the high-ability students (group A) think. My findings from the video data show that in group B’s instruction, there is normally a teacher assistant in addition to the English teacher. With a higher teacher density, more help can be offered to the students, especially concerning individual differentiation, which might help explain the results about *care* from the questionnaire.

Considering *challenge*, both the high-ability students (group A) and the low-ability students (group B) feel they are challenged during their English instruction and learn something new almost every day. This is an interesting finding, since they report similar experiences despite the similar use of texts and questions across the groups. Naturally, with the same content, the low-ability students might feel to a certain degree that they are more challenged than the high-ability students.

Looking at the construct *confer*, the questionnaire reveals that the average scores of both groups are above 3, which means that the students are more or less satisfied at this area. There are several situations offering evidence from the videos that the teacher prompts the students to share their thoughts and ideas in the classroom, and during the literature circle, the students in group B had more opportunities to talk and the teacher offered uptake of the students’ talk to a larger extent than in group A. Based on the students’ experiences, this kind of learning process might be experienced as relevant.

According to the scores for *captivate*, the students in group A sometimes agree on the fact that the English instruction is enjoyable and interesting, while the students in group B find
their English instruction to be more interesting than the students in group A. These results might indicate that the students in group B finds the activities more interesting than the students in group A.

4.2.1 Summary

In this section, I have aimed to answer my second research question: *To what extent are the students in the ability groups satisfied with their English instruction?* In sum, the results from the questionnaire support the findings from the video data. Overall, the students in group B seem more satisfied with their English instruction in the ability groups than the students in group A, although both groups express positive experiences of their English instruction in these groups.
5 Discussion

In this chapter, I will combine the introduced concepts and theories of this thesis with my findings in order to answer my sub-questions:

1) What characterises differentiation provided in English lessons using random grouping and ability grouping?

2) To what extent are the students in the ability groups satisfied with their English instruction?

I will now discuss what characterises differentiation in these two different types of groups, prior to discussing if ability grouping invites differentiation to a larger extent than random grouping.

5.1 What characterises differentiation in English lessons random groups compared to ability groups?

In this thesis, I have used Tomlinson’s (2014) model of differentiation as a tool to help me identify to what extent and how teachers differentiate their English instruction in 9th grade when students are divided into different groups. My findings show that in these groups there is barely any differentiation concerning content, while there is some differentiation related to product and classroom environment, and extensive differentiation of the learning process. I also found that most of the observed differentiation occurred in situations which focused on text-based instruction, with the clear majority of the differentiated instruction in the ability groups.

I will start by discussing what characterises differentiation during these English text-based instructions (5.1.1), and then I will discuss the teachers’ differentiation concerning the use of time (5.1.2), before I discuss how differentiation is characterised in the environment of an English classroom (5.1.3).
5.1.1 Differentiation in input and output during English text-based instruction

Several activities can be conducted in order to create the differentiated English classroom. It is interesting to see that the differentiation I observed concerns both input (e.g., reading, listening) and output (e.g., speaking, writing), both of which were closely related to text-based instruction. At the school with ability grouping, there was a clear differentiation between the groups concerning the input. Despite this differentiation in input, there was no differentiation considering the content. Tomlinson (2014) highlights the importance of having a quality curriculum, and argues that all students should have the same opportunity to benefit from it.

Both ability groups read the same two English short stories and answered the same questions linked to the text. This indicates that the teacher at the school with ability grouping believes that all her students, no matter their English competence, had an equal chance to accomplish the same curricular goals. However, the findings also show that the learning process was quite different across the two groups, which says something about how the different students approached the same goals differently, based on how the teacher differentiated her instruction. This is where the input differed between the groups. In the group with high-ability students, writing was used as a thinking process to help them understand the input. In the group for low-ability students, oral activities were used as the thinking process, which means they were thinking out loud and building on each other’s ideas. The differentiation of input resulted in a differentiation in the output as well. The output for the high-ability students entailed on the production of text, while the output for the low-ability students focused on oral communication.

The teacher’s differentiation of process resembled Vygotsky’s ZPD (Vygotsky, 1978). In both ability groups, the students had a learning partner and at several times, they were asked to discuss with their partner. For example, the students were told to first individually make a mind map about the topic of the short story 2, prior to comparing it with their learning partner. Like this, the students could fill in more information in their own mind map. This is an activity where the students, no matter their current understanding, were able to develop knowledge with more help, in line with the notion of ZPD (Vygotsky, 1978). This is an
example of how the students through communicative dialogues in their groups can approach to new knowledge that they cannot understand on their own.

This activity, to make input comprehensible using oral communication, relates to RAND’s (2002) theory about students developing their reading comprehension in a sociocultural context where there is an interrelationship between the text, the reader and the reading activities, such as analytical tasks. When solving analytical tasks, students transform the input into output. Here, the teacher differentiated the output by asking the students in group B to answer these tasks in an oral form, and the students in group A in the written form.

By organising the students in group B into a literature circle, the teacher supported the struggling readers in understanding the short story. All low-ability students, except two, joined this literature circle. This was not provided as an activity for students in group A with high-ability students, and I interpret this as them being more proficient readers who managed to extract meaning from the textual input individually. However, it is difficult for struggling readers to make meaning out of a text (Carlson et al., 2014), in terms of understanding the input on their own. In this situation, the teacher spent time making the input comprehensible for the struggling readers by explaining each passage in the short story, in line with Krashen’s input hypothesis (1982) and Vygotsky’s ZPD (1978). In this literature circle, there was an elaborative talk where the teacher built the conversation on student talk. My quantitative analysis of the video data show that by doing so, the teacher’s uptake of student talk scored higher in group B than in group A.

Swain (2001) argues that the best way of learning a language is to speak it. She further states that the teacher should push the students to talk, and in this way, they can more easily find their gaps in their language. When the teacher organised the literature circle, she based it on the use of oral communication. As there were students already sitting in a literature circle at the beginning of the lesson, it seemed like this was a common procedure for group B for the purpose of developing their reading comprehension. In addition, the two students who did not want to join the literature circle, were allowed to read silently instead. This differentiation at the individual level indicates that the teacher decided not to push these two students into talking, unlike Swain’s (2001) suggestion. However, she still required the students to produce
some sort of output in order to be aware of the gaps from the input, so these two students produced output in written form.

The students at School 2, with random grouping were also supposed to read texts (input) prior to showing what they had understood, which resulted in oral presentations (output). Therefore, when the teacher at this school differentiated her English instruction related to the content and product, it resulted in various output.

There was also differentiation in the output and product at the group level at School 2. In addition to the random group division, the teacher had organised the students into three levels for their oral presentation (1, 2, and 3). There is no evidence of the criteria for organising the students into these levels, however, the results from the video data showed that only students at levels 2 and 3 could choose their audience when giving their presentations. They could choose to present in front of group A or B, or in front of the teacher only. The students at level 1 on the other hand, were not given this choice, as they were obligated to present in front of the whole class. This differentiation in product can be useful to create an environment which supports those who prefer to not be orally active in front of the whole class.

The teacher’s differentiation in these random groups might prevent what Krashen (1982) refers to as classrooms where students feel their weaknesses are revealed. However, unless the levels are organised in terms of students’ comfort in being orally active, this type of differentiation can also be interpreted as the students at levels 2 and 3 do not have the abilities to present in front of the whole class. There is not enough evidence from the video data to know the common procedures for oral presentations at School 2, but if a student at levels 2 or 3 can choose to present in front of only the teacher every time they have oral presentations, there will be a lack of practice concerning speaking in front of a bigger audience. If the environment in the classroom is the factor which prevents the students from being orally active, there should be a focus on differentiating the environment, since oral communication is one of the main competences to develop English language skills (Swain, 2001).
Creating a classroom environment where the students can feel safe and not pushed into talking, can lower their affective filter (Krashen, 1982). The students in the literature circle had a great opportunity to be orally active and practice their reading fluency. When these students read aloud, they also got feedback on how they read, which suggests differentiation between the groups since the students in group A had no opportunity to read the text aloud, and therefore got no feedback on their reading fluency. This is may have been because the teacher found the students in group A to master fluency in reading.

In group B, the teacher corrected some oral mistakes where the students struggled. However, there was no feedback on what the students could do to make progress. Krashen (1982) argues that positive feedback can lower the student’s anxiety. Another way of lowering the anxiety, is to focus less on the form of the language and more on meaning (Swain, 2001). This indicates that the teacher in the ability groups instead focused on making sure the students understood the input, than producing quality output. In the literature circle, the collaborative dialogue between the teacher and the students focused only on the meaning of the text, and there were barely any comments on the students’ language form.

Even though there was to a high extent opportunities for student talk in group B, there was not necessarily much discussion without the teacher pushing the students for answers. Additionally, the students in group B often switched from discussing in English to discussing in Norwegian, even though the teacher told them to speak in English only. These situations were less frequent in group A’s lessons. It is uncertain if these situations were caused by a lack of English language skills, or if there is any form of an anxiety of being orally active in the English language, which prevents them from speaking. Nevertheless, students might be very engaged in what they are talking about if the discussion topic interests them, which might make them forget they are talking in English (Krashen, 1982). By engaging the students in producing oral output, the teacher can differentiate the English instruction by basing it on the students’ interests (Tomlinson, 2014). However, the questionnaire revealed that the students in group B actually found the topics in their English instruction interesting and captivating, and even more so than what students in group A think.

Another way to increase the students’ reading comprehension is to provide intellectually challenging tasks so they can be actively engaged with the text (Ness, 2016; RAND, 2002).
The teacher intellectually challenged the students in both ability groups with the same tasks. However, she handed out a task to the students in group A, which focused on developing their written skills, and this task was offered in group B. The quantitative findings from the video data revealed that there were several opportunities for text-production in group A, but no text-production in group B, therefore, the output differed extensively between the groups, which seemed adapted to the student’s ZPDs (Vygotsky, 1978). Moreover, as the teacher spent more time making the input comprehensible for the low-ability students (group B), this resulted in more challenging tasks than what they might have managed on their own, and these required high-level inferential thinking and discussions.

The video data revealed that the students in group B found the input more difficult to understand than group A, and they needed more support from the teacher. If the text is too difficult, it can lead to demotivation and a slower development of reading skills. Yet, if the students are interested in reading a specific text, they can be motivated to read more, which will contribute to developing their reading comprehension (RAND, 2002). As reading is one of the basic skills in Norwegian schools, it is important to differentiate the instruction in order to enhance reading comprehension (KD, 2012; RAND, 2002). If the students in the ability groups are expected to read these short stories at school, the teacher can prompt the students into extensive reading in their spare time to increase their motivation for reading.

Another way to help students understand on their own the meaning of a text in the second language, is to teach the students reading strategies, which were not conducted in neither group A nor B (Brevik, 2015; RAND, 2002; Goldman et. al, 2016). However, offering language support in terms of vocabulary to help the students understand and be motivated to read a text, is also profitable. It is suggested that students should understand 98% of the words in the text (Day & Bamford, 2002). In line with this notion, my findings show that the accommodation for the students’ language learning was more frequent for the low-ability students than for the high-ability students. In the ability groups, the teacher facilitated the text for group B by explaining new or difficult English vocabulary after each passage, and this did not occur in group A as they read individually and silently.
In an English perspective, there is therefore language learning development both in input and by output. At both schools where I observed differentiation, the focus was on how to extract and construct information from the text (RAND, 2002). The differentiation was mostly related to the use of oral or written skills. Additionally, the differentiation did not only occur in the sociocultural context of the classrooms, but also in a cultural context by understanding the social or historical objectives of input individually.

5.1.2 Differentiation in the use of time

Fosse (2014) mentions that instruction can be differentiated by adjusting the pace of instruction, which results in a differentiation in the process. At the school with ability grouping, the teacher’s English instruction enabled the students in group B to spend more time on each activity than group A. In a classroom with a positive climate, questions are welcomed and the students actively participate in oral discussions (Claxton, 2007; Coe et. al., 2014). In addition, the teacher allocated time to listen to the students’ questions (Ness, 2016), and my findings show that the teacher at School 3 did this often. In section 4.1.2, I provided an example of a conversation between the students and the teacher about a text review. This conversation included several questions which the teacher spent time answering.

Clear instructions can save time spent on confusions in classrooms. The conclusions of the lessons at the school with ability grouping may have been influenced by the lack of time in group B, as it turned out to be a bit more stressful in group B than in group A. In group A, they summarised the texts and the lessons with small written or oral activities. In group B, there was no summarising, or a brief summarisation orally for 30 seconds only.

According to the students in group B, the teacher often clarifies during the instruction, more often than in group A, which the teacher chose to spend time on in each lesson.

5.1.3 Differentiation in the classroom environment

There are fewer discipline problems in differentiated classrooms (Weselby, 2017). In group B, there were a few situations where students discussed in a negative tone of voice. What is interesting, is that these situations only occurred in group B, when the students worked in pairs, and not in the literature circle. This indicates that a change of students’ seating might have an impact on the classroom environment. Further, the questionnaire discloses that
students in group B think the teacher cares about them, for instance by differentiating the English instruction based on the students’ interests, readiness and learning profile (Tomlinson, 2014). In group B, the teacher identified the students’ readiness when she summarised the beginning of short story 1, prior to summarising every further passage in the text during the lesson. To separate students into groups based on readiness can be profitable to for instance prevent the high-ability students having to wait for the low-ability students finishing their tasks. Additionally, if low-ability students develop their English proficiency faster by using collaborative dialogues, the teacher has differentiated the instruction according to their learning profile (Tomlinson, 2014) as well attended to their ZPD (Vygotsky, 1978).

In the groups where there was observable differentiation, this largely concerned differentiation in the learning process at School 3 with ability grouping. Here, the teacher focused on a differentiation in how to make input comprehensible for both high-ability students and low-ability students. There was little or no correction on the output from the students, which was production of text by the high-ability students and oral communication by the low-ability students. The teacher also differentiated the environment by constructing literature circles in one of the groups to enhance the students’ learning outcome. The teacher at School 2 with random grouping who differed the student presentations, focused on a differentiation in the input by offering students a choice of content to present. She also differentiated the product that is the output, in which the students could choose their audience.

5.2 Does ability grouping invite differentiation to a larger extent than random grouping?

Using organisational differentiation to create homogeneous groups is rare in Norwegian schools, which is often explained by the lack of knowledge considering the rules about how to conduct such grouping (NOU2016:14). In addition, such homogeneous grouping is referred to as a group composition based on students’ level and results, and prior studies argue that such grouping contributes to zero or no positive learning outcome (Fosse, 2014;
Delisle, 2015; NOU2016:14). However, homogeneous groups can also mean temporary organisational differentiation based on students’ social belongings, and is therefore not against any rules (NOU2016:14).

In contrast, using extra resources on dividing whole classes into two random groups does not necessarily give any effect concerning differentiation. At School 2, the school with observable differentiation in random grouping, the division into groups seemed to be profitable in order to let the students present their products to the teacher, in the hallway. Furthermore, since the other school with random grouping, School 1, did not conduct any observable differentiation, this suggests that differentiation is not necessarily provided if a class is divided into two random groups. The teacher had a great opportunity to accommodate to the students’ needs, as there were fewer students in each group than what they were during whole-class instructions. This situation suggests that there are fewer interests, and learning profiles to keep in mind when planning differentiation. Still, this random grouping did not contribute to observable differentiation in these English classrooms.

There are several ways to differentiate no matter what kind of group division is chosen. RAND (2002) suggests that different groups can have different learning goals, even though they use the same content. Group A and B at School 3, with ability grouping, had similar, but different learning goals whereas the goal for group A required more from the students than the goal for group B. The teacher seemed to differentiate and organise the English instruction to make students in both groups reach their goals although the content was the same.

Vygotsky’s concept of ZPD concerns how learners get help from their teacher and help each other to develop knowledge (Vygotsky, 1978). From a sociocultural perspective, there is a problem which can occur in homogeneous groups, and that is whether students can help other students with the same ability into the ZPD. However, in heterogeneous groups, high-ability students can develop more slowly if they always need to help for instance low-ability students, while there is no one to help them. In this case, composing homogeneous groups based on readiness and ability could more easily accommodate the teacher to be the one to help students into their ZPD. Therefore, schools and teachers should choose group divisions in order to fulfil students’ needs for the social interaction and cooperation in English instruction (cf. Vygotsky’s concept of ZPD and Krashen’s concept of i+1). This type of
differentiation might be beneficial for both high-ability and low-ability students (NOU2016:14). If the students are placed in organisationally differentiated groups based on the sociocultural perspective, the students’ oral and written communication skills could increase, which can enhance their English language skills (Dysthe, 1999; Swain, 2001).

I have only analysed data from one school with ability grouping, but the results were remarkable, showing me clear differentiation between groups with high-ability students and low-ability students. In periods of time, to provide high-quality differentiation, schools can organise students into groups in a similar manner. As differentiation is wanted in all English classrooms, there should not be any fear of composing such groups because interestingly enough, the students’ experiences indicate that they are satisfied with their English instruction with ability grouping. Additionally, temporary ability grouping maintains the Norwegian rules considering the non-permanent basis of organisational differentiation. Nevertheless, my findings show that there is to a high extent educational differentiation within these groups as well, both at the group level and at individual level.

My findings show that the educational differentiation provided in the ability grouping contributed to the development of the students’ English skills. These results contrast with prior research which concludes that there is no effect for low-ability students when organised into homogeneous groups (NOU2016:14). However, both my quantitative and qualitative analyses of the video recordings reveal that students in both high-ability and low-ability groups benefitted from such grouping. With video observations, I was able to see what actually happened in three English classrooms with various group divisions, and to support my observation I conducted a questionnaire in which the students’ responses agreed with my video analyses of the students in the ability groups. Not only did the student responses reveal that students in both ability groups were satisfied with their instruction, they also showed that low-ability students are more satisfied with their instruction than high-ability students.

Previous research suggests that there are not enough intellectual challenges for low-ability students (Delisle, 2015; Kulik & Kulik, 1982). According to my findings, I see this differently. The low-ability students responded in the questionnaire that they feel intellectually challenged during their English instruction, in fact, more challenged than what
the high-ability students express. Additionally, students feel cared about, something which can create a good classroom environment.

Interestingly, there is more educational differentiation at the school with ability grouping, that is to say, ability grouping seems to address differentiation to a larger extent than random grouping. And luckily, the students in these groups are content with their English instruction.
6 Conclusion

In this MA study, I have answered the following research question: *To what extent and how do teachers differentiate their English instruction in 9th grade when students are divided into different groups?* Specifically, I have identified 1) What characterises differentiation provided in English lessons using random grouping and ability grouping? and 2) To what extent are the students in the ability groups satisfied with their English instruction?

To my surprise, I have discovered major differences between the observed differentiation in the two types of grouping I have studied; namely random grouping (at two schools) and ability grouping (at one school). I found that while there were few examples of differentiation at the schools who practiced random grouping, differentiation was prominent in the ability groups, which the students were assigned to, based on pedagogical principles of maturity, independence and effort in the subject. Students learn in different ways, and therefore, different activities should be provided in all classrooms (Carlson et. al. 2014; Tomlinson, 2014). Additionally, regardless of the students’ English skills they should all have the same opportunities to build on their strengths and needs, and reach their designated goals, which I observed in the ability groups. This notion acquires teachers to differentiate their instruction based on students’ interests, readiness and learning profile in order to become differentiated English classrooms.

Furthermore, my findings showed that the students in the different ability groups, who showed various levels of English skills, understood the meaning of the same text through the observed differentiation of the learning process. These students demonstrated reading comprehension in the sociocultural context of the classroom, where oral communication between the teacher and the students seemed to help them develop their understanding in line with the principles of Vygotsky’s zone of proximal development (Vygotsky, 1978).

The teachers differentiated the process and the content in English instruction in order to make input comprehensible. Additionally, the teachers also differentiated the outcome of students by providing intellectually challenging tasks to be answered either in written form or orally, and the product when giving students a possibility to present in front of different audience. In line with Swain (2001), the differentiation in input and output in these lessons seemed to
increase the students’ English language skills as they will be more aware of their gaps in the language.

6.1 Implications

The implications of my study show that in order to obtain a differentiated English classroom the allocated resources need to be used to the full extent. By this argument, I point to the resources used to divide English classes into two groups with half of the students present in each lesson. If there are no resources to divide into groups, it is also possible to differentiate in a classroom of more than 20 students. If the goal of the lesson is to read and understand a text, the teacher can place one group with students who want to read individually in one side of the room, and in the other side of the room, students who would like to read aloud and discuss the text can sit in a literature circle. When working with tasks linked to the texts, the tasks should be intellectually challenging. Therefore, the teacher can differentiate the tasks with, for instance, giving high-ability students more analytically demanding tasks and let them skip the easiest ones.

Another suggestion can be to differentiate the students’ oral presentation. The students can choose audience and have different opinions when choosing the content of product. If there is only one teacher in a classroom, and the students want to have their presentations only in front of the teacher, the rest of the class can in the meanwhile work with different tasks in the classroom. This is probably something several teachers have previously tried out, but the findings at School 2 indicate that it works in providing differentiated English instruction.

However, if there are resources to divide classes into groups, I suggest composing groups based on pedagogical principles of maturity, independence and effort in a subject, which results in homogeneous ability grouping, in line with the findings at School 3. The teacher can provide different goals to the different groups. The goals should be approached by conducting different activities in order to meet the students’ needs to develop input comprehension, and output communication.
6.2 Further research

My suggestion for further research would be to investigate the use of extra resources, and see to what extent they are used to address differentiation based on students’ needs (ZPD). As I have only studied one school with ability grouping, and found positive results considering differentiation in the English classroom, I see a need to research more on different schools with ability grouping, which will perhaps support and strengthen my findings. It would also be interesting to investigate how different organisational groups are constructed. If one should do so, I suggest investigating naturalistic features in the instruction by for instance using video recordings to see what actually happens in the classroom. In my opinion, it is more valuable to look at students’ language learning in the differentiated English classroom, which is in line with Tomlinson’s (2014) statement of the importance of making learning satisfactory.

6.3 Concluding remarks

I am surprised by the findings that this study deliver, as today’s discussion about ability grouping brings up mostly negative reactions. My intentions when starting this study were not to be left with such outstanding findings, and I am sure this research has made me an even better differentiation-oriented teacher. Now, I have several ideas of how I can differentiate my future English instruction in better ways than I previously did. I hope this study can be a voice in the never-ending debate of how to compose ability groups in order to enhance students’ learning outcome while still maintaining a satisfaction in their English instruction. Based on the combination of video analyses and student surveys, I now know what is really going on inside some differentiated classrooms, and I can see English language learning ability groups. Creating a differentiated English classroom to enhance the students’ learning process and development is the most valuable aspect of becoming a teacher!
7 Literature


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Appendix 1: English Translations

English translation of example taken from pp. 50-51

Christopher: [in an annoyed tone of voice to another student]
    Let me be alone!

Jenny: [in an ironic tone of voice] You’re so kind!

Christopher: Yes and let me be alone!

Teacher: What’s up, Christopher, what’s up?

Christopher: No, they are bothering me! They irritate me.

Jenny: It’s him who pulls the chair.

Christopher: Oh, so I’m not allowed to have my legs here? Seriously? I can’t have my legs here?

Teacher: Stop please. Alright, have you discussed a little bit?

Christopher: Ahm, yeah.

Teacher: What you know about lotteries?
Teacher: I just want you to remind you a bit before we start that you have a text review to hand in. […]

Michael: Can I do it in this lesson instead?

Teacher: No, you can’t, I’m sorry. So, you may hand it in as soon as you have done the text review […] and if you want to hand in the text review of [title of short story 1] today or tomorrow, you can do it. Whenever you want, in fact […]. The deadline is the end of next week. Yes, Thomas?

Thomas: When are we going to hand in the task?

Teacher: Excuse me?

Thomas: Ehm, when do we hand in the last task or ah

Teacher: This text review? If you have… if you want to do it now, today or tomorrow, if you have done it, you can hand it in. Ok? Right? So…

Sebastian: [Title of short story 1], isn’t that… hand it in next week?

Teacher: You can hand it in the next week if you haven’t… if you want to have the choice, and you want to wait until you’ve read [title of short story 2], you can hand it in next week. Maybe we can have some time during class as well to, ahm, to work on that one.

Michael: I’ve come pretty far on the [name of short story 1], so is it ok for me to just continue on it during the lesson?

Teacher: We’re going to…

Christopher: We’re going to do some activities all of us here and we’re going to speak together and discuss so, ahm, I’m sorry about that

Michael: Do I have to read… [unclear]

Teacher: […] Yes, we will at least start it today and we will continue the next time. But if we have… if we can manage to have some time in one of the lessons next week, we can maybe work a little bit on the text reviews as well. Is that fine?

Michael: Yes

Teacher: Yes, but you need to do something at home too. And it’s really good that you have started, Michael, that’s very good. Yeah?

Michael: But when is it supposed to be handed in?

Teacher: I said, well I put Sunday because I thought that if you finished it now, if you finish it now, then you can have time to do something else next week. Because you have…

Michael: But if I finish it this class

Teacher: But not this..

Christopher: [in a frustrated tone of voice] You can’t do it because we are going to do something else!!!

Teacher: Sh, sh, sh Christopher, please.
Appendix 2: Signed Consent Form

Signed consent form for LISE project

Erklæring ved tilgang til LISA (Linking Instruction and Student Achievement) sine forskningsdata

Forskningsprosjektet LISA (Linking Instruction & student achievement) har forpliktet seg til å følge personopplysningslovens retningslinjer ved all registrering, lagring og bruk av det innamslede datamaterialet. Ved tilgang til dette materialet er du forpliktet til å gjøre deg kjent med og følge disse retningslinjene (se: http://www.lordata.no/all/nl-20000414-031.html). Datamaterialet skal ikke under noen omstendighet deles med tredjepart eller fremvises til andre.

Jeg bekrefter herved at jeg har gjort meg kjent med personopplysningslovens retningslinjer, og lover å følge disse i mitt arbeid med datamaterialet tilhørende forskningsprosjektet LISA.

Undertegnede plikter også å referere eksplicit til LISA prosjektet (ved prosjektleder og data euler Professor Kirsti Klette) ved all bruk av data/ design, kodekjempe og tekniske løsninger som bygger på dette prosjektet, jf. Forskningsetiske komiteers krav til God Forskningspraksis/ Henvisningskikk (http://www.etikkom.no/Forskningsetikk/God-forskningspraksis). Enhver situasjon der datamateriale som tillides LISA benyttes i analyser i publikasjoner skal være kjent for prosjektleder og data euler Professor Kirsti Klette før publisering.

Sted  Dato  Underskrift
Oslo  20/05/16  Illina Solberg
For LISA  20/06/16  Jan S. Bulloch