

Faculty of Humanities, Social Science and Education

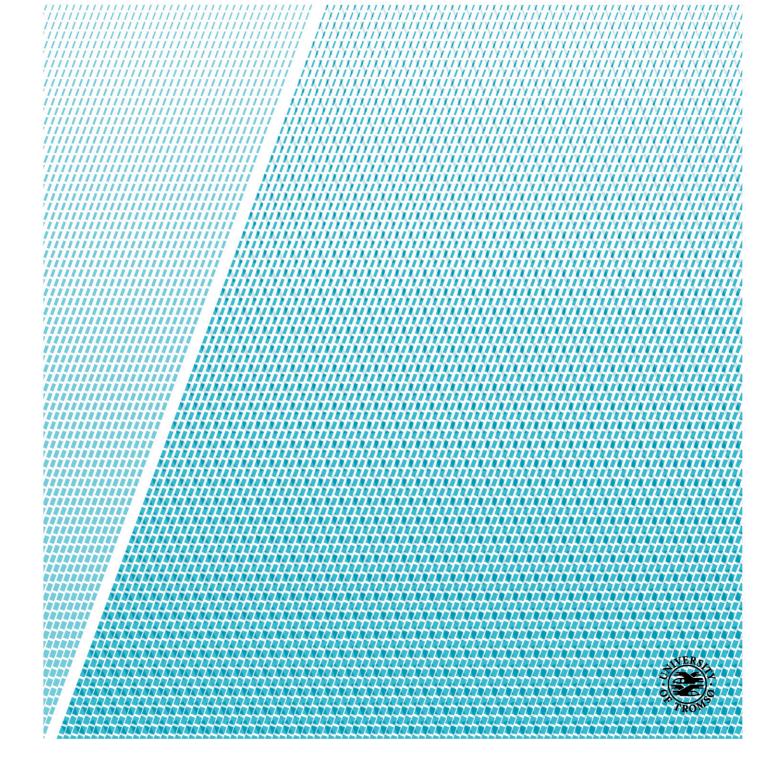
# **Differentiated Instruction in the English Subject**

A qualitative study of teachers' approaches to differentiated instruction and the factors that affect their ability to differentiate

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# **Acknowledgements**

This thesis marks the end of my time as a student teacher at University of Tromsø – The Arctic University of Norway. Writing this thesis has been challenging, but also incredibly interesting and educational. I decided to investigate a topic that I believe is highly relevant for many teachers. I believe this thesis has provided me with valuable knowledge within the topic of differentiated instruction - knowledge that I can benefit from in the future.

I want to thank my supervisor, Kristin Killie, for providing me with constructive suggestions, useful guidance, and motivational support throughout the study. I would also like to express my great appreciation to co-supervisor Christian Samuelsen for his valuable contribution to my study. Furthermore, I am particularly grateful for all the teachers who participated in the interviews. I would also like to thank my fellow graduate students for sharing good ideas and countless cups of coffee with me. Finally, I wish to thank my family and my friends for constant support and continuous encouragement throughout the process of writing this thesis.

Tromsø, 15.05.2019.

Kristian Granås

# **Abstract**

In this thesis I have investigated the following research question:

How and to what extent do a selection of English teachers differentiate their instruction according to their students' needs, and which factors affect their ability to do so? This study investigates how a sample of English teachers differentiate instruction through content, product, process, and affect/environment according to the students' readiness, interests and learning profile. Further, the study explores the different factors that affect the teachers' ability to differentiate instruction.

To answer my research question, I have collected data using a qualitative approach where I conducted interviews with three English teachers. The data were analysed according to Tomlinson's (2017) framework for differentiated instruction, which illustrates differentiated instruction as differentiation of content, process, product, and affect/environment according to the students' readiness, interests, and learning profile.

My findings indicate that the participants differentiate to some extent, mostly through content and process. Moreover, the findings show that all participants emphasise the importance of differentiating instruction according to the students' needs. Apparently, the factors that affect the participants' ability to differentiate instruction are aspects of their own working conditions, competence concerning how to differentiate instruction, the students' knowledge gap, and limited resources.

# Sammendrag

I denne oppgaven har jeg utforsket følgende forskningsspørsmål: *Hvordan og til hvilken grad differensierer et utvalg av engelsklærere sine instruksjoner i henhold til elevenes behov, og hvilke faktorer påvirker deres evne til å differensiere?* Denne studien utforsker altså engelsklæreres tilnærming til differensierte instruksjoner gjennom innhold, prosess, produkt og miljø i henhold til hvor beredt studentene er og studentenes interesser og læringsprofil. Denne studien vil i tillegg utforske faktorene som påvirker lærerens evne til å differensiere instruksjoner.

For å besvare dette spørsmålet har jeg samlet inn data ved å bruke en kvalitativ tilnærming der jeg intervjuet tre engelsklærere. Dataen som ble samlet inn er analysert i henhold til Tomlinsons (2017) rammeverk for differensiert instruksjon. Dette rammeverket illustrerer differensiert instruksjon stegvis der læreren differensierer innhold, prosess, produkt, og miljø i henhold til hvor beredt studentene er i tillegg til deres interesser og læringsprofiler.

Funnene i denne studien indikerer at deltagerne differensierer til en viss grad, mest gjennom innhold og prosess. Funnene viser også at alle deltagerne fremhever viktigheten ved å differensiere instruksjonen i henhold til studentenes behov. Videre, faktorene som påvirker deltagernes evne til å differensiere instruksjon er påvirket av deres arbeidsforhold, kompetanse med tanke på hvordan man differensierer instruksjon, forskjellene i studentenes kunnskap, og begrenset med ressurser som tid og kompetanse.

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# **List of Abbreviations**

*NESH* – The National Committee for Research Ethics in the Social Sciences and the Humanities

NSD – Norwegian Centre for Research Data

ZPD – Zone of Proximal Development

# 1 Introduction

I will in this chapter start by presenting the background and motivation for conducting this study. Further, I will identify and describe my research question and describe the organisation of the thesis.

# 1.1 Background and motivation

One can argue that a constant challenge for teachers is to provide the students with the best possible instruction. It is reasonable to believe that most teachers feel that their teaching instruction could be improved to some extent. However, it is virtually impossible for teachers to adapt their instruction to suit all the abilities and preferences of every student in a classroom (Lightbown & Spada, 2013, p. 92; Tomlinson, 2017, p. 2). The students' individual differences are important factors why this is an unmanageable task. Lightbown and Spada (2013, p. 92) emphasise that an instructional approach which adheres to only *one* way of teaching all students, assuming students acquire knowledge equally, will ultimately restrict the students' possibility to learn and develop. Therefore, by being aware of the students' differences, teachers could be better suited to adapt and differentiate their instruction to as many students as possible (Heacox, 2012, p. 7). In The Education Act (2008, §1-3), the importance of considering the students' differences is also emphasised: "[e]ducation shall be adapted to the abilities and aptitudes of the individual student, apprentice and training candidate". Further, The Norwegian Directorate for Education and Training emphasise the learning needs of all students. Under the section "Adapted education and equal opportunities" it is stated:

The diversity of pupil backgrounds, aptitudes, interests and talents shall be matched with a diversity of challenges in the education. Regardless of gender, age, social, geographical, cultural or language background, all pupils shall have equally good opportunities to develop through working with their subjects in an inclusive learning environment. Adapted teaching for each and every pupil is characterised by variation in the use of subject materials, ways of working and teaching aids, and variation in the structure and intensity of the education. (Norwegian Directorate for Education and Training, 2015, p. 5)

In the Norwegian curriculum the importance of all students working towards the same competence aims is emphasised. Being able to differentiate in the classroom is a vital competence for the professional teacher (Norwegian Ministry of Education and Research, 2011). How teachers differentiate their instruction vary, but a key element is that all students can meet the same competence levels, but with different instruction (Imsen, 2016, p. 402; NOU2016:14, 2016, pp. 24-25). Thus, the teachers need to make informed decisions based

upon research when teaching, and they must keep the students' competence and learning preferences in mind (Bjørke, 2018, p. 27).

There are several perspectives on how humans learn and develop. Howard Gardner (2011) states that humans possess different types of intelligences which they learn and develop through. Vygotsky, Cole, John-Steiner, Scribner, and Souberman (1978) emphasise the social interaction between humans as imperative to learning and development. A behaviourist' view on learning will support that learning happens best through imitation and reproduction of the environment around them (Lightbown & Spada, 2013, p. 15). John Hattie (2012) advocates for "visible teaching and learning". This concept implies that learning occurs when there is a deliberate goal of mastering something, when the appropriate feedback is given, and when there are engaging people participating in the learning process (Hattie, 2012, p. 14). These are just some examples of the different views concerning how people learn and develop.

How can teachers in English classrooms approach their students, knowing that they all develop and learn differently? How can teachers plan, practice, and assess, knowing that the students learn in different ways? These questions were major inspirations for why I wanted to explore the topic of differentiated instruction. Differentiated instruction is an interesting concept to examine and discuss in light of these challenges – as differentiated instruction as an approach is more likely to "provide virtually all students equity of access to a high-quality education. This is because it's rooted in our best understanding of how people learn" (Tomlinson, 2017, p. 14).

Differentiated instruction and its principles have developed through the idea that students learn better when teachers use a variety of methods (Kapusnick & Hauslein, 2001). Kapusnick and Hauslein (2001) state that both Gardner's (2011) theory of multiple intelligences and the sociocultural theory and the zone of proximal development (ZPD) by Vygotsky et al. (1978) are relevant theories regarding differentiated instruction. These theories are interesting to discuss in relation to how differentiated instruction can be effective for the students' ability to learn and develop. The theories will be examined further in Chapter 2.

The Norwegian Ministry of Education and Research define differentiation in an Official Norwegian Report (NOU2016:14) as follows: "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, 2016, p. 66). In a quite similar manner, Carol Ann Tomlinson and Marcia Imbeau define differentiation as, "a classroom practice with a balanced emphasis on individual students and course content" (Tomlinson & Imbeau, 2010, p. 14). Both these definitions portray differentiation as a teaching approach that focuses on both the teachers' instruction and the learners' needs in the classroom.

Prior research on the effects of differentiated instruction is limited (NOU2016:14, 2016, p. 25). However, interesting research has been conducted on the topic - focusing on the teachers' role in differentiated instruction. A study done by Nanang, Suprayogi, and Valcke (2017) showed that a large student diversity demands appropriate instructional strategies. The result from their study shows that teachers believe that differentiated instruction is important, but is experienced as a challenging task.

A study conducted by Nicolae (2014) supported that a steadily increasing diversity amongst the students makes differentiated instruction more important. In her study, she also revealed that teachers misinterpret the functions of differentiated instruction, and Nicolae advocates for a raise of awareness regarding the topic.

Robinson, Maldonado, and Whaley (2014) conducted a case study of nine American teachers to examine how teachers from an elementary school, a middle school, and a high school successfully differentiate instruction. They found that teachers lack the knowledge of how to implement differentiated instruction, even if they recognised the importance of it. Further, their result showed that a large challenge that the teachers encountered was time constraints.

Brevik and Gunnulfsen (2016) also emphasised the importance of the teachers' knowledge of differentiated instruction in their study. Their study was conducted on 322 student teachers, where the results showed that the student teachers experienced challenges in identifying differences amongst the students. Brevik and Gunnulfsen (2016) argue that guided training in the practice of differentiated instruction should be implemented in teacher education programs.

Borja, Soto, and Sanchez (2015) studied differentiated instruction in relation to English as a foreign language. In their study, they also examined how Vygotsky's sociocultural theory influenced differentiated instruction and the teaching/learning process. Their findings indicate that teachers who are able to differentiate instruction can further help students reach the

communicative competence and language skills that a foreign language demands. In addition, their findings show that teachers need to know their students to some extent to be able to differentiate instruction according to the students' needs - hence the focus on the sociocultural aspect.

In general, it seems as differentiation occurs in many classrooms and is considered to be important by several teachers. However, the studies above present an image of teachers (and student teachers) who lack knowledge about *how* to differentiate instruction in the classroom. This made me contemplate why differentiated instruction seemed to be challenging for a lot of teachers. I wanted to explore the topic more comprehensively by interviewing English teachers to examine their own experiences with differentiated instruction. I wanted to see how they differentiate instruction themselves, and explore which factors that affect their ability to differentiate their instruction.

# 1.2 Research question

My focus on the topic of differentiation and the role of the teachers led me to the following research question:

How and to what extent do a selection of English teachers differentiate their instruction according to their students' needs, and which factors affect their ability to do so?

I have used Carol Ann Tomlinson's (2017) concepts as a framework for differentiated instruction (see Figure 1). I will therefore examine how a selection of English teachers differentiate instruction through content, process, product, and affect/environment according to the students' readiness, interests, and learning profile.

#### 1.3 Outline

I have structured my thesis into six different chapters. Chapter 2 consists of the theoretical framework of my thesis. In Chapter 3, I will explain the different methods used for conducting the research. I will also review reliability, validity, and ethical considerations. In Chapter 4, I present my research results and provide a thorough analysis and examination of the findings. Chapter 5 consists of a discussion regarding the main findings. In Chapter 6, I conclude and summarise the thesis and offer a suggestion for further research. The appendixes include the interview guide in English and Norwegian, and the approval form from the *Norwegian Centre for Research Data* (NSD) for conducting my research.

# 2 Theoretical framework

This chapter covers the theoretical framework of the thesis. I will examine how differentiation is represented in different Norwegian government documents such as the Education Act (2006), NOU2016:14 (2016) and other government documents, and examine how it is relevant to the English subject. I have relied greatly on Carol Ann Tomlinson (2017; 2010; 2013) in this chapter in regard to how teachers can differentiate instruction. Further, as mentioned above, I will examine Lev Vygotsky's (1978) sociocultural theory and the ZPD and Howard Gardner's (2011) theory regarding multiple intelligences to study how these perspectives relate to differentiated instruction.

# 2.1 Differentiated instruction in a Norwegian context

The term *differentiation* in Norway became relevant in Norwegian primary schools as obligatory schooling expanded from seven years to nine years in 1969 (Norwegian Ministry of Education and Research, 2011, p. 20). The knowledge-gap between the students increased as they got older, something which gave differentiation an impetus. A larger focus was directed at differentiation, both educational- and organisational differentiation (see section 2.2) (Imsen, 2016, p. 402; NOU2016:14, 2016).

English is considered as a second language in Norway – meaning that it is "taught at scheduled hours in the classroom and acknowledged for its significance to education, business and mobility" (Rindal, 2014, p. 8). A second language can be described as "any other language other than the first language learned by a given learner or group of learners" (Smith & Candlin, 2014, p. 7). However, it is important to clarify that for some learners in Norway - English might even be a third- or fourth language. However, in this thesis, *second language learners* will encompass all learners who do not have English as their first language. Moreover, *second language learning/acquisition/development* is in this thesis used interchangeably, and refer to the process which happens inside the learner (Smith & Candlin, 2014, p. 12)

Norwegians today are more exposed to English than before through media and travelling (Pinter, 2016; Rindal, 2014). English extramural input, i.e. language input received outside the classroom, is becoming more frequent in countries where English is taught as a foreign language, such as Norway (Sundqvist & Wikström, 2015). The varied amount of extramural input and different competence levels arguably make differentiation more necessary in English classrooms in Norway. Pinter (2016) underlines multilingualism and multiculturalism

as two of the main challenges for teachers in the second language classroom. As an approach towards these challenges, Pinter (2016, p. 372) emphasises differentiation with regard to the learners' interests, differences, and preferences as a natural response. The teachers' instruction can thus be a crucial factor regarding how learners acquire a second or foreign language (Ellis, 1997). Second language learners who possess different kinds of abilities may benefit from different types of instruction - an aspect which is a fundamental trait of differentiated instruction (Ellis, 1997, pp. 86-87; MacIntyre, Gregersen, & Clément, 2016; Tomlinson, 2017, pp. 27-30). However, teaching English as a second language is a challenging responsibility because of the differences amongst the individual learners and their language learning process (MacIntyre et al., 2016). An aspect of language teaching most teachers find problematic is the gap of knowledge and different levels of motivation amongst their students (Vold, 2018, p. 273).

In NOU2016:14 (2016, p. 9) it is stated that Norwegian primary- and secondary schools' effort towards differentiated instruction is unsatisfactory. The Committee who authored the report explain that one of the reasons might be a lack of knowledge regarding how to help students succeed on a higher level. They are addressing the issue and additionally advocate for a systematic change in order to further develop knowledge and competence regarding differentiated instruction (NOU2016:14, 2016). This systematic change should be of national proportions - where common goals, roles, and responsibilities regarding differentiated instruction are clearly identified. The Committee argue that there is a need for a common interpretation and understanding of each school's options regarding differentiated instruction (NOU2016:14, 2016, pp. 9-10).

The Committee present their recommendations for change in three different categories: (1) the framing condition, (2) knowledge, research and experience; and (3) competence and teaching practice. The framing conditions include the subject curricula, assessment provisions, and legal provisions. There is also a necessity for more knowledge about and research on students with higher learning potential. The school owners, leaders and teachers could benefit by acquiring research and knowledge about this issue. The last category is of particular importance for my research as it relates to the teachers. The Committee state that a competence raise concerning teaching practice and differentiated instruction can lead to a collective professional teaching community – a community which consequently can create a culture characterised by high ambitions for the students. This community of teachers can

continually examine and improve their own competence and teaching practice in order to achieve the goal of a better school for all students (NOU2016:14, 2016, pp. 11-12).

# 2.2 Educational and organisational differentiation

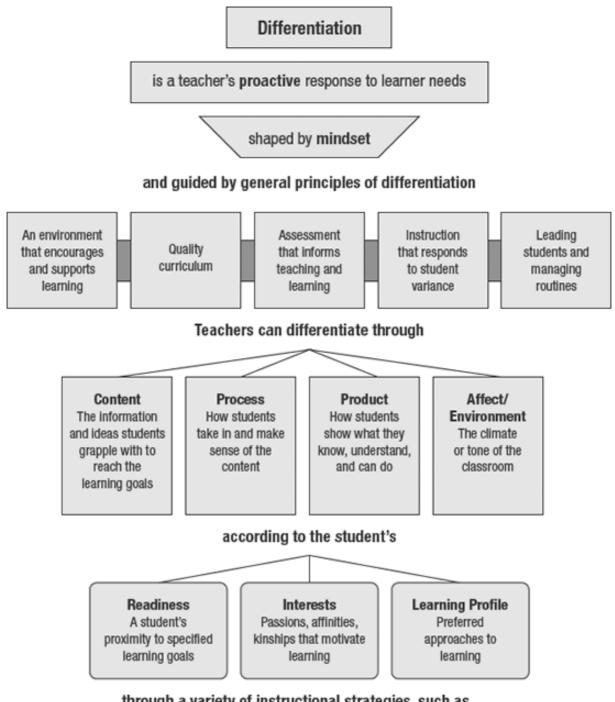
Differentiation can be divided into two separate types: *educational differentiation* and *organisational differentiation* (Imsen, 2016, p. 404; NOU2016:14, 2016, p. 66). With educational differentiation, the teacher adapts the content, process, or product according to the students potential, motivation, level of knowledge, and preferred way of learning (NOU2016:14, 2016, pp. 66-67). The purpose of educational differentiation is to support the students' motivation and development in the subjects. Educational differentiation is similar to Tomlinson's (2017) perceptions regarding how to differentiate (see section 2.3). By differentiating the content, process, or product the teacher can provide students with learning materials specified for the individual student. By providing the students with special tasks in regard to their own interests, preferred learning method, and current knowledge level, one can inspire development and prevent under-achievement (NOU2016:14, 2016).

Organisational differentiation refers to the teachers' grouping of the students according to their abilities, knowledge level, and/or interests (NOU2016:14, 2016, pp. 69-70). As with educational differentiation, the purpose of organisational differentiation is to ensure that each student is being offered the best opportunity to learn and develop. Social interaction and the composition of students into groups are factors that influence how students work. Therefore, the teachers need to have a certain degree of knowledge and comprehension regarding the dynamic of a student group in order for organisational differentiation to be advantageous (Imsen, 2016, pp. 403-404; NOU2016:14, 2016, pp. 66-70; Tomlinson, 2017, p. 4).

Teachers who want to differentiate classroom instruction should contemplate using both educational- and organisational differentiation. According to Imsen (2016, p. 405), varying the academic content is paramount in both educational- and organisational differentiation.

### 2.3 How to differentiate in the classroom

I will in this section examine differentiation in the classroom. The teachers' essential role in differentiation will be analysed, and I will inspect the important part that the students have in regard to differentiated instruction in the classroom. In order to present the various aspects of differentiation in the classroom more clearly, I have used a model from Tomlinson and Moon (2013, p. 2) as a foundation for this thesis. The model is presented in Figure 1 below:



#### through a variety of instructional strategies, such as

Learning/Interest Centers • RAFTs • Graphic Organizers • Scaffolded Reading/Writing Intelligence Preferences • Tiered Assignments • Learning Contracts • Menus • Tic-Tac-Toe Complex Instruction • Independent Projects • Expression Options • Small-Group Instruction

Figure 1 – a framework for differentiated instruction <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> RAFTs: assignments that present the students with different thinking or communication prompts. The prompts asks the students to assume a Role, for a specified Audience, expressed in a particular Format, on a key Topic central to the study at hand (Tomlinson, 2017, p. 120).

Figure 1 presents differentiation in three different levels: (1) the general principles of differentiation, (2) elements which teachers can differentiate through, and (3) differentiated instruction in regard to the students' readiness, interests, and learning profile. Figure 1 depicts the complexity of differentiated instruction. Differentiated instruction is not simply a teacher's different approach towards the students' readiness, interests, and learning profile - it is much more than that. The several components all affect each other, and should be examined as a whole (Tomlinson & Moon, 2013, pp. 1-2). I will in the next sections explain each tier in Figure 1 in order to further describe the tiers and how they relate to each other.

### 2.3.1 General principles of differentiation

The first tier in Figure 1 covers the five general principles of differentiation.

The first principle in the tier is the principle of an *environment that encourages and supports learning*. A good learning environment is key for students, and the teacher's aim should be to attend to the various learning needs of each student. A good learning environment can be promoted in different ways. Choice of curriculum, engaging instruction, classroom leadership, and trusting and respecting the students are just a few elements which all affect the learning environment (Tomlinson & Moon, 2013, pp. 3-5). The teacher designing the curriculum should focus on creating clear and engaging learning goals for the students. Goals that make it easier for students to understand what they are going to learn (Tomlinson & Moon, 2013).

The second principle is *quality curriculum*. This principle encompasses the importance of a curriculum that is designed and organised in a way that supports and promotes learning. As mentioned, a quality curriculum should provide students with clear learning goals in order to limit misunderstandings of what is being taught. To make the curriculum understandable and engaging for the students, it should be differentiated in order to meet the students' learning needs (Tomlinson & Moon, 2013, pp. 6-8). This is interesting to relate to a Norwegian context as the core elements in the English subject (and the other subjects) are in 2020 being restructured to include fewer elements. This is done in order to help the students acquire a deeper understanding of the English subject (Norwegian Ministry of Education and Research, 2016, pp. 33-36).

Assessment that informs teaching and learning is the third principle. The idea of this principle is to see assessment as a tool that can be used frequently in the classroom. The assessment can be of both formative and summative kind. Formative assessment is used in order to

continuously monitor the students' learning and development. Afterwards, the teacher can make informed decisions based on the assessment in order to further give instruction that benefits the students' growth and success (Tomlinson & Moon, 2013, p. 19). Summative assessment is different as the goal is to measure and evaluate the students' learning outcomes after a certain period of learning. Both types of assessment serve a purpose. However, in a differentiated classroom, it is *mostly* through formative assessment that teachers receive information that consequently helps them make decisions on how to further differentiate instruction according to the students' needs (Tomlinson & Moon, 2013, p. 26).

The fourth principle is *instruction that responds to student variance*. How teachers give instruction and how students experience the instruction are the fundamental ideas behind this principle (Tomlinson & Moon, 2013, p. 9). Tomlinson and Moon (2013, p. 10) argue that the teachers' instruction is significant regarding differentiation, and state that efficient instruction is crucial in relation to curriculum, assessment, and classroom leadership in order to increase the students' knowledge, understanding, skill, and autonomy as a learner. A teacher should therefore be familiar with the students, as it can give the teacher an opportunity to differentiate instruction that aligns with the students' needs.

This principle emphasises the importance of *leading students and managing routines*. This principle covers how teachers can guide the students in their learning process as well as managing routines in the classroom. A teacher leading a differentiated classroom should focus on the welfare of each student, and the goal should be to inspire growth and development for each individual student and the whole class as a group. Managing routines covers the teacher's ability to help the students understand and contribute to the different factors in the classroom that enable learning. Examples of such factors are students who are helping their peers, minimal disturbance by e.g. noise, and a classroom arrangement where the learning material is easily accessible. Moreover, a classroom with routines can help both the students and the teacher work efficiently (Tomlinson & Moon, 2013, pp. 14-16).

# 2.3.2 Differentiating through content, process, product, and affect/environment

In this section I will examine the key aspects which teachers can differentiate through, according to Tomlinson & Moon's (2013) model. The examination will revolve around the elements of *content*, *process*, *product*, and *affect/environment* as these are key elements in

regard to differentiated instruction in the classroom (see also Blaz, 2016, pp. 2-6; Tomlinson, 2017).

Content is what the teachers want the students to learn, i.e. the information, skill-set, attitudes, knowledge, ideas, or facts that the students need to gain access to (Tomlinson & Imbeau, 2010, p. 15). A teacher differentiates content by e.g. telling one student to work on the past tense in English while other students are working on different verb forms. Content can naturally vary, and there are several ways to differentiate the content topic (Blaz, 2016, pp. 2-3). Tomlinson (2017) exemplifies several methods to use in order to differentiate content. I will give a brief explanation of the methods relevant to this thesis. The methods I will further describe are: peer and adult mentoring, minilessons, and adjusting the phrasing and presentation of content (Tomlinson, 2017; Tomlinson & Imbeau, 2010).

Peer and adult mentoring can be used in order to provide students with additional guidance. This can benefit both the student who needs help and the adult or peer helping. If a student possesses competence and knowledge regarding a certain topic in English, he or she can be a resource for the entire class. Using peer or adult mentors in the classroom can give everyone a chance to learn more, as well as contributing to each others' learning (Tomlinson, 2017, pp. 130-131).

Minilessons is a valuable method to use in order to differentiate content to students, and it can be effective in targeting content to the students' interests, readiness, and learning profile. Teachers can use minilessons to provide one certain group of students with different input than the teachers initially used. This is done to make sure that all students have the same understanding of the content (Tomlinson, 2017, p. 128).

The last method concerns the teacher's ability to differentiate content by adjusting the phrasing and presentation of content. The teacher can use a variety of assignments, texts, or other materials directed to the students. For example, a certain phrasing of an assignment can prove to be too advanced for some learners. The teacher can present content to students differently using e.g. video, sound, pictures, and blogs, amongst other modes. By rephrasing or adapting the presentation of an assignment, the students get a chance to access content differently which consequently can make content clearer for the students. Additionally, it can make it easier for the students to make sense of the content, and thus learn from it (Tomlinson, 2017, pp. 126-130).

The term *process* refers to how the students make sense of the content, i.e. how do the students best learn the content, and how can they preserve the content they are exposed to (Blaz, 2016, pp. 11-12; Tomlinson & Imbeau, 2010, p. 15). Process can also be referred to as a sense-making process – meaning that process includes activities that help the students make sense of something, e.g. a certain political ideology. An important aspect of process is for the teacher to engage the students in order to help them develop and use essential knowledge and skills so that they can progress from their current level of understanding to a more complex level of understanding (Tomlinson, 2017, p. 133). The practice of differentiating process relates to how well the teacher is able to provide the students with sense-making activities that match the students' needs. Tomlinson (2017) exemplifies methods such as: reading groups, class or group discussions, learning contracts, role-playing, and tiered assignments (parallel tasks at different levels of difficulty) as valuable. There is no formula for what type of activity to use. The important aspect is that, whichever activity chosen, it has to relate to the students' readiness, interest, and learning profile (Tomlinson, 2017, pp. 135-137).

The *product* is the culminating phase where the students get to demonstrate what they have learned after an extended period of working with a subject or topic (Tomlinson & Imbeau, 2010, pp. 15-16). The product is closely linked to assessment methods where the students can show how much they have understood and learned. Whether the assessment method is a larger report, a test, or an interview, the function is to evaluate and assess the students (Blaz, 2016). Product is, similar to content and process, differentiable. Teachers can differentiate product by letting the students present their learning outcomes through different formats such as: debates, interviews, presentations, experiments, websites, charts or graphs, plays, and more (Tomlinson, 2017, p. 150). If the students are given the opportunity to participate in decisions about their own learning, it can enhance not only their own individual development, but also the development of the entire student group. Besides, it can help develop the social relations in the class which is an important factor for learning and development according to a sociocultural view on learning (see section 2.2.4) (Norwegian Directorate for Education and Training, 2015).

Affect/environment encompasses the learning climate and tone in the classroom. The teacher should strive to create a good learning climate that supports and accelerates learning (Tomlinson & Moon, 2013). The teacher can use the classroom in order to facilitate learning by e.g. displaying the students' earlier work in the classroom, managing the seating arrangement, or use appealing colours in the classroom. The physical appearance of the

classroom is important to facilitate learning. An environment where the students feel respected, involved, challenged, and supported is crucial, and "a necessity for robust differentiated instruction" (Tomlinson & Imbeau, 2010, p. 20). The idea is to create a classroom where both the teachers and the learners contribute to a community which is interested in the needs of all its members (Tomlinson, 2017, p. 43).

These four factors create a framework for differentiation, and can provide teachers with knowledge concerning how to differentiate instruction. However, too much focus on the details of the content, process, product, and affect/environment can be undesirable, because of the fact that it may become too rigorous (Doubet & Hockett, 2017, p. 220). Doubet and Hockett (2017) advocate for a more sensible way of interpreting differentiation where the focal point is on the students' learning needs which is directed by the assessment, rather than a rigorous focus on content, process, and product. Tomlinson (2017, p. 7) concurs with the notion that differentiation is rooted in assessment, and states that assessment can help the teacher study how each individual student prefers to learn. According to (Tomlinson, 2017, p. 1) a successfully differentiated classroom can provide different approaches to the content, the process, and the product, which consequently can provide each student with support in order to learn effectively. By differentiating these elements, the teacher can "offer different approaches to what students learn, how they learn it, and how they demonstrate what they've learned" (Tomlinson, 2017, p. 7). In the next section, I will explore how the students' readiness, interest, and learning profile relate to differentiated instruction.

# 2.3.3 Differentiating according to the student's readiness, interest and learning profile.

The students' *readiness*, *interest*, and *learning profile* are the elements found in tier three in Figure 1. These elements focus on the students, and emphasise that the teachers' instruction of content, process, product, and affect/environment should be differentiated according to the these elements (Tomlinson & Moon, 2013, pp. 9-10). Further, students learn better when teachers provide them with tasks and assignments that are matched with their readiness, interests, and learning profile (Tomlinson, 2017, p. 83).

Readiness refers to the "student's proximity to specified learning goals" (Tomlinson & Moon, 2013, p. 10). In other words, is the student ready to learn or even able to understand the particular learning goal? Readiness depicts a reality of the students' intelligence, and how dynamically and differently people acquire knowledge (see section 2.3.5). According to

Tomlinson (2017, p. 83) a good readiness match will drive the student just beyond his or hers current level of knowledge, understanding, and skill. This is closely related to Vygotsky's sociocultural theory – particularly the notion of ZPD, as will be described in section 2.3.4. By differentiating the instruction according to the students' readiness, the teacher can guide each student towards reaching the desired learning goals.

Interest refers to how teachers can include the students' interests when differentiating instruction. Tomlinson and Moon (2013) emphasise the teachers' opportunity to differentiate according to the students' interests - as this may lead to more engaged students because of the fact that the subject is both interesting and appealing to them. Besides, when students are engaged, they are more likely to concentrate and be persistent in their work, even if the work is difficult. Engaged students can also lead to students who experience satisfaction and a sense of pride in what they do (Tomlinson & Moon, 2013, p. 7)

The students' *learning profile* is the last element in the tier. A learning profile can be defined in terms of the learning methods that best suits the individual, i.e. how a learner prefers to learn something new (Tomlinson, 2017, p. 110). Learners may have different types of learning profiles, as the profiles are shaped by "gender, culture, the environment, biology, and a particular learning context" (Tomlinson & Moon, 2013, p. 11). The students' learning profile is closely linked to the students' intelligence preferences and the multiple intelligences (see section 2.3.5) which people learn and develop through (Tomlinson, 2017, p. 113).

Figure 1 presents differentiation in the classroom in a tidy way, where each of the three tiers presents important aspects of differentiated instruction. While Figure 1 gives insight into differentiated instruction, it is important to mention that there is no formula or recipe for a differentiated classroom (Tomlinson, 2017, p. 54). Moreover, according to Tomlinson (2017), each differentiated classroom is unique as it is affected by the teachers' personalities, the students' learning needs, and the subject and grade level. Therefore, a differentiated classroom can be experienced in different ways depending on the aspects mentioned above, but the principles of differentiated instruction apply across classrooms.

# 2.3.4 Sociocultural perspective of learning: The zone of proximal development.

The use of language, active participation, and social interaction are central aspects of Lev Vygotsky's theory about the sociocultural perspective of language learning and development (Duff & Surtees, 2018; Riddle & Dabbagh, 1999). Differentiated instruction is based on a

socio-constructivist perspective which highlights that learning develops best when the students get the opportunity to learn and exchange ideas with other people (Idsøe, 2015, pp. 172-173).

Moreover, Idsøe (2015) states that learning can be further enhanced by challenging the learners' current development level. Children develop at different stages, and learning should therefore be matched to the children's development level to some extent (Vygotsky et al., 1978, p. 85). According to Vygotsky, there are two different development levels: *the actual development level* and *the level of potential development*. The actual development level is the child's current level of development in regard to his or hers mental functions. The child's actual development level shows what functions the child has already mastered. The potential development level can be explained as the level of understanding which the child has not yet reached (Vygotsky et al., 1978, pp. 85-86). If a teacher is familiar with the students' needs, he or she can differentiate instruction to match the students' development level. This is where Vygotsky's concept of ZPD becomes relevant.

Vygotsky et al. (1978, p. 86) define ZPD as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers." The interaction between a student and a more capable peer, e.g. a teacher or a student, is a central aspect of sociocultural theory and crucial regarding ZPD - it is how learning and development best occur (Holzman, 2018, pp. 43-45; Lightbown & Spada, 2013, pp. 118-119). Moreover, as cognitive change happens within the ZPD, the teacher should strive to differentiate instruction in a way where it will reach a development level slightly exceeding the students' current level (Riddle & Dabbagh, 1999).

The instruction from the teacher should help the learners access their own ZPD. The teacher's ability to engage the students and provide them with manageable tasks is essential so each and every student can reach their ZPD. By differentiating the instruction towards the learners and their learning needs and learning style, one can increase development amongst the learners (Ellis, 1997, pp. 86-87; Riddle & Dabbagh, 1999).

### 2.3.5 Multiple intelligences.

I will in this section study the connection between the theory of multiple intelligences and differentiated instruction. As mentioned in Chapter 1 and in section 2.3.3, differentiation

involves taking the student's learning profile into account. The theory of multiple intelligences is a relatable concept.

Howard Gardner (2011) developed the theory of multiple intelligences. Gardner (2011) suggests that there are more than just one type of intelligence, and lists a total of eight different types of intelligences: linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalist. I will not explore each type of intelligence in any more depth, but rather connect Gardner's theory in general to the educational perspective and differentiated instruction. The intelligences listed above depict the complexity and diversity of how humans acquire knowledge. The concept of multiple intelligences gives the teacher a range of teaching strategies to use in the classroom (Armstrong, 2017, p. 70). The concept of multiple intelligences is an interesting theory as it can help the teacher adapt and differentiate instruction to align with the students' intelligences. The strategy chosen may work well with one group of students, however it is not given that the strategy works well in another group.

The aim of this short section has been to emphasise differentiated instruction in relation to how differently people learn and develop. Considering the perspectives of Gardner (2011) and Armstrong (2017), it is apparent that there are several different possibilities concerning learning and development. The teacher can encourage academic growth by differentiating their instruction in regard to the students' preferences, intelligences, and preferred way of thinking. If the instruction is differentiated successfully, it will possibly suit students with different intelligences, the students who are academically talented, students who are struggling academically, and the students in between (Heacox, 2012, p. 7).

# 3 Methodology

I will in this chapter explain the research approach which I found to be the most appropriate in regard to my research question. First, I will describe the research design chosen, before I specify how I collected and analysed the research data. Afterwards, I will describe the parts of the interview guide and the participants. I will also discuss the validity and reliability of my project. Finally, I will expand on the ethical considerations in regard to my project.

# 3.1 Research design

John Creswell (2014, p. 3) presents three different approaches to a research project: *qualitative*, *quantitative*, and *mixed method*. These three approaches all have distinctive functions depending on the plan and procedures of the research project. However, the boundaries between the approaches are not as clear-cut as they might seem, and it is therefore normal to present a study as "more qualitative than quantitative or vice versa" (Creswell, 2014, p. 3).

A quantitative approach can be described as an approach with the aim of testing objective theories by using different variables and measuring these before the data can be analysed further (Creswell, 2014, p. 4). Creswell (2014, p. 4) explains a qualitative approach as an approach where the aim to explore and understand the meaning behind a social or human problem by studying the complexity of a situation. A mixed method approach lies somewhere in the middle of the two aforementioned approaches, and can be recognised as an approach where both qualitative and quantitative data is collected in order to present a more thorough understanding of a research problem (Creswell, 2014, p. 4).

### 3.1.1 Qualitative approach

Considering my research project and research question, I believe that a qualitative approach is a more appropriate approach than a quantitative or a mixed method approach. My research question aims to explore how and to what extent teachers differentiate instruction in the English subject, and which factors that affect their ability to do so. I expected the data collected to be a complex set of thoughts, ideas, and assumptions which all were subject to interpretation. According to Creswell (2014, p. 186), the idea of qualitative research is to explore and study a problem from the participants' views, as I aim to do. Bjørndal (2012, p. 109) emphasises that qualitative research opens for a thorough understanding of the social processes between a few participants. In addition, Creswell (2014, p. 189) and Postholm (2010, p. 36) state that the role of the participants is imperative, as they are purposefully

selected in order to provide the researcher with information so that the researcher can further explore the research question at hand. An advantage of qualitative research is the dynamic structure of the approach, meaning that the researcher can change the process throughout the research (Bjørndal, 2012, p. 109). This is especially useful as the researcher may discover new information or insights concerning the research, and thus has the opportunity to alter the process if needed.

Regarding a qualitative research approach and different worldviews, the common idea is that qualitative research is situated within the constructivist worldview (Creswell, 2014, p. 8; Postholm, 2010, pp. 33,126). The constructivist worldview can be recognised as a worldview where the participants' views and understanding of a subject are subjective, varied, and multiple (Creswell, 2014, pp. 8-9). Considering my research question, it is reasonable to expect the participants' contribution to be both subjective and varied. The research question I use is relatively open, and the participants of the study are not restricted in regard to their answers. Therefore, the role of the researcher is to interpret the participants' experiences, thoughts, and underlying opinions about the topic of the research question.

Considering my own research project, I will argue that it is best categorized as a phenomenological design. The experiences of the individuals concerning a certain phenomenon are emphasised in phenomenological research (Creswell, 2014, p. 14). In qualitative research it is common for the researcher to be the tool of interpretation. The researcher is also central in regard to a phenomenological design, as it is the researcher's responsibility to describe the participants' experiences concerning the project (Creswell, 2014, pp. 4,14).

### 3.2 Methods of data collection

Qualitative research is often recognised as data gathered from observations, interviews, or through public or private documents (Creswell, 2014, pp. 190-191). Considering my research project and my research question, I will argue that interviews are a suitable and advantageous data collection method.

#### 3.2.1 Semi-structured interview

The different types of interviews can be assorted into structured interviews, semi-structured interviews, and unstructured interviews (Christoffersen & Johannessen, 2012, p. 78). A structured interview is recognised as a set of fixed questions where the questions are asked in a particular order. A semi-structured interview is similar to a structured one, but the structure

of the questions is more flexible. Some question may be decided beforehand, but the researcher has more freedom to alter the phrasing and the order of the questions throughout the interview process (Christoffersen & Johannessen, 2012, p. 79). An unstructured interview can be described as an interview where the questions are not decided beforehand, but they develop during the interview process. The types of questions that develop depend on the topic of the research (Christoffersen & Johannessen, 2012, pp. 78-79).

In regard to my research question, I will argue that the most advantageous type of interview is a semi-structured interview. A semi-structured interview is a versatile method of collecting data, especially if the goal is to explore the experiences of different participants (Galletta, 2013, p. 46). My research question places a focus on the participants' experiences, making semi-structured interview a useful method of data-collection. In addition, Bjørndal (2012, p. 116) emphasises a benefit of semi-structured interviews which is the opportunity to ask follow-up questions in order to clarify any potential misunderstandings. As mentioned earlier, my research question focuses on the teachers' practice of differentiated instruction. I therefore incorporated open-ended questions concerning differentiated instruction, as these questions have the advantage of giving the participants the opportunity to provide in-depth information about a subject through explanation. Further, in semi-structured interviews, the participants can speak their mind without the boundaries of rigid questioning (Bjørndal, 2012, p. 118; Galletta, 2013, p. 47). Besides, semi-structured interviews can help reduce the researcher's influence on the participants and their answers, because the participants' are able to speak their minds, arguably ensuring that the participants' answers are of high accuracy (Bjørndal, 2012, p. 116). In the next section, I will more thoroughly examine the types of questions used in the interviews.

#### 3.2.2 The interview guide

The decision to use an interview guide was made in order to create a basis for my interview, and a template I could use in the interview process. An interview guide is useful as it can function as a quality insurer in regard to the interview, as well as creating a structure for the interview (Bjørndal, 2012, pp. 97,101; Creswell, 2014, pp. 193-194). Bjørndal (2012, p. 97) states that the structure of the questions in the interview guide can be flexible, but it is common that the interview contains both key questions and follow-up questions. This is supported by Creswell (2014, p. 194) and Galletta (2013, pp. 45-46) who argue that the questions used in the interviews vary from ice-breaker questions and background questions concerning the theme of the interview, to follow-up questions and key questions about the

topic later on. Bjørndal (2012, p. 100) states that background questions and "icebreaker" questions are often used at the beginning of the interview as they can help to "ease the participant" into the interview process and the topic of the interview. Furthermore, questions asked at the beginning of the interview can be used by the researcher in order to receive the interviewee's general understanding and experience concerning the topic at hand (Christoffersen & Johannessen, 2012, p. 80) Follow-up questions, as mentioned above, are beneficial as they can help the researcher to get as much useful information from the participant as possible (Bjørndal, 2012, pp. 100-101). In addition, probing questions are useful as they can be used in order help interviewees explain their ideas in more detail (Creswell, 2014, p. 194). Probing questions are questions about a certain theme or idea brought up during the interview which the researcher wants the participants to elaborate on. Such questions are often used to keep the participants on track and to avoid receiving too many unnecessary answers. Probing questions can therefore be useful in semi-structured interviews, as the openness of semi-structured interviews can easily lead to the participants getting off-topic (Price, 2002).

I planned to use all these types of questions in my interview, however, considering the fact that I conducted a semi-structured interview, some questions asked were not necessarily planned beforehand. The type of questions I decided to use in my interview guide were determined by my research question (Bjørndal, 2012, p. 99). I deducted central aspects of differentiated instruction before I created the interview guide. This was done in order to acquire more thorough knowledge about the topic before the interview. My knowledge concerning differentiated instruction would prove to be useful in the interview, as I were able to ask follow-up questions about the topic in order to receive information that would eventually help me answer my research question.

Before I conducted the interviews with the participants, I decided to conduct a pilot interview using two of my fellow students. This was done in order to best prepare and review the interview process and the interview guide, something Christoffersen and Johannessen (2012, p. 84) present as a useful tool. Galletta (2013, p. 49) states that a pilot interview can provide the researcher with new ideas regarding the phrasing, structure, and usefulness of the questions.

The questions I used in the interviews cover the participants' background and experience as an English teacher. I included questions about differentiated instruction in general, in order to

examine the participants' prior knowledge and understanding of the term. Moreover, I included questions where I wanted to explore the participants' own teaching practices regarding differentiated instruction. Further, I sorted the questions into categories in order to try to create a reasonably organised and clean interview process, even though I conducted semi-structured interviews. The interview guide is enclosed in its entirety in Appendix 2. A Norwegian version of the interview guide is found in Appendix 3.

### 3.2.3 The participants

Before the process of recruiting participants began, I made sure that my research project was cleared by NSD. My goal was to gain access to at least three participants. I assumed that three participants would provide me with sufficient amount of data and that it would also realise the norm of phenomenological research where three to ten participants is a typical (Creswell, 2014, p. 189). A research project with fewer participants can be a hinder to the generalisability of the study. On the other hand, too many participants and the time aspect becomes a hinder, and may lead to a less careful interview analysis (Kvale, Brinkmann, Anderssen, & Rygge, 2015, p. 148). Besides, generalisability is not the main goal of qualitative research, as described in section 3.4.2.

When I started recruiting participants, I strategically sought after participants who I assumed would provide me with valid information regarding differentiated instruction. This approach is referred to as a purposeful sampling (Creswell, 2014, p. 189; Tjora, 2012, p. 145). As mentioned, the aim was to recruit at least three teachers with English as their main subject and preferably from lower secondary schools. The decision to recruit teachers from this level was based on the fact that the students' knowledge gap increases as the students get older (Imsen, 2016, p. 402). My belief was that teachers from lower secondary schools would possibly have a more conscious relationship with differentiated instruction in contrast to teachers from e.g. primary schools. Those were the criteria before the recruitment process began.

Recruiting participants to my study became a larger challenge than anticipated. I was unsuccessful in my attempt to recruit teachers only from lower secondary schools, which was my aim. Because of that fact, I had to alter my original plan and contact potential participants from primary schools. I was eventually successful in recruiting a third participant whose teaching experiences mainly derived from teaching English from Year 4 up to Year 7.

In summary, I managed to recruit three participants, of which one works in a primary school and the others work at lower secondary schools. The participants have been given fictitious

names and will be presented as *Karen, Jane* and *Michael*. Not all of the participants have the same formal education in English. Previous education programs have been converted into the currently used system of study points in order for the education to be comparable. All teachers have at least 60 points, meaning that they fulfil the current requirements of teaching at lower secondary schools (Education Act, 2006, §14-3). The participants' education background, experience and teaching level are presented below. It will not be possible, however, to generalise about the relationship between these factors and differentiation on the basis of such a small sample.

Teacher	Formal education in	Years of teaching	Level of teaching
	English	the English subject	
Karen	90 points	21	Lower secondary
Jane	60 points	3	Lower secondary
Michael	60 points	7	Primary

Table 1 – The participants' English teaching experience.

# 3.3 Method of data-analysis

Data collected in a qualitative study can be quite large. In order for the researcher to analyse it, it is important to sort out the data which is relevant for the study conducted. The goal is to try to make sense of the data collected by segmenting the data before putting it back together (Creswell, 2014, p. 195). Additionally, Creswell (2014, p. 195) states that the process of data analysis is dynamic and continuous during a research project. Furthermore, it is important that I as the researcher fully understand my own interpretation in order to understand the participants' interpretation (Christoffersen & Johannessen, 2012, pp. 22,100). This is particularly important in regard to phenomenological studies as it is the interpretation of the data collected that is essential in relation to the research question (Christoffersen & Johannessen, 2012, p. 100; Kvale et al., 2015, pp. 232-233).

### 3.3.1 Step 1: Transcribing

I used a recorder to record the interviews, which I later on would transcribe. This was done so that I could focus on the topic and the dynamic of the interview with the participant. With a recorder I was able to catch all the stops, pauses, and the tone of voice, which I consequently could include in the transcripts and in the analysis. Moreover, when the interviews are in text-

form they are better suited to analyse (Kvale et al., 2015, p. 204). Postholm (2010, p. 104) argues that the transcription process should be done by the researcher because the analysis and interpretation of the transcripts might lead to the discovery of new relevant aspects of the data collected - aspects which were not noticed during the interview.

On the other hand, transcription as a method does have some disadvantages, such as preserving reliability and validity. Tjora (2012, p. 145) states that a large disadvantage is that the transcripts will not include any visual signal given from the interviewee, nor is it able to register the mood during the interview. Since I transcribed the interview myself, I "revisited" the interview process and could therefore register the visual signal which I registered, which is another reason why a researcher should be a part of the transcription process (Tjora, 2012, p. 145). Kvale et al. (2015, p. 212) state that there is no objective translation from oral to written text. Therefore, in order to increase the reliability of my transcripts I listened to the recorded interviews repeatedly to make sure that I did not leave out anything. To secure validity, I included the pauses, stops, and tones that I registered in the interviews in order to for the transcripts to be as accurate as possible (Kvale et al., 2015, pp. 211-213).

Another issue that is relevant to comment on is the fact that I conducted and transcribed the interviews in Norwegian. I conducted the interview in Norwegian, as I believed an interview conducted in the participants' first language would provide the most natural answers. In addition, I had to translate parts of the transcripts to English in order to use it in the analysis and discussion. This notion is discussed further in section 3.4.2 concerning validity.

### 3.3.2 Step 2: Coding

Coding of collected data is a common method to use when the data collected derives from interviews (Kvale et al., 2015, p. 226). Coding is beneficial as it helps the researcher organise and present relevant information of the data collected (Christoffersen & Johannessen, 2012, p. 101). The first stage in the coding process is to read through all the collected data, which in this case are the interview transcripts. This is done to help the reader get a general impression of the interview and be able to review it without a too rigorous focus on the details. Having done this, I made a list of all the key words and phrases that I considered to be relevant regarding my research question (Creswell, 2014, pp. 198-199; Tjora, 2012, p. 185).

I conflated the key words and phrases into fewer categories. I decided to include aspects of Tomlinson and Moon's (2013) model when I categorized the data. This approach towards qualitative coding is referred to as content analysis (Ezzy, 2013, p. 83). Content analysis is

useful as I can compare the data collected with existing theory on differentiated instruction. By creating categories based on Tomlinson and Moon's (2013) model (see Figure 1), I could examine the aspects of this theory in relation to differentiated instruction and English language learning (Ezzy, 2013, p. 85). The categories I identified through content analysis inspired by Tomlinson and Moon's (2013) concepts are: differentiation through content, process, product, and affect/environment and differentiation according on the students' readiness, interests, and learning profile. These categories will be analysed in section 4.1 and 4.2.

I also identified new categories while I was reading through the transcripts. While the categories mentioned above were decided beforehand, other categories were identified from the data collected. To identify categories from within data collected is called a thematic analysis (Ezzy, 2013, p. 88). The usefulness of a thematic approach to coding is apparent, as I noticed that some of the data collected involved topics that I had not planned to focus too much on. The categories I identified through a thematic approach were *the teachers' working conditions* and *challenges regarding differentiated instruction*.

I included the *teachers' working conditions* as a category because the participants' answers and reflections regarding differentiated instruction repeatedly included the environment and surroundings of their teaching practice, e.g. number of students, number of teachers in the classroom, how their colleagues work with the English subject, and more. Because of the fact that the participants' working conditions strongly affected their ability to differentiate instruction, I believe it was necessary to include it as a category in order to further analyse it. The teachers' working conditions will be discussed in section 4.3.

Considering the other category, *challenges regarding differentiated instruction*, I did anticipate it to be a topic of discussion as one of the questions in the interview guide concerned the topic. However, it became a larger topic in the interviews than I first anticipated. In order for me to make a more organised presentation of the data, I considered it to be practical to divide this category into sub-categories. Therefore, the category containing challenges is divided into the following sub-categories: *differentiation and the students' competence gap* and *differentiation and resources*. The challenges that affected the teachers' ability to differentiate instruction will be discussed in section 4.4.

## 3.3.3 Step 3: Investigating the categories

I focused on each category individually as a conclusive step of the data analysis process. I read through all the transcripts one more time in order to make sure I had included all the relevant data into the respective categories. After I had organised each category, I noticed interesting resemblances and variances between the categories. The connection between the categories is important as the relationship between them may contribute to a more complex and thorough analysis (Creswell, 2014, p. 200). All the categories are thoroughly analysed in Chapter 4.

# 3.4 Reliability and validity

In this section I will discuss the *reliability* and *validity* of my research project. All research projects should strive to produce knowledge that is both valid and reliable. The way I collect, analyse, and interpret the data, and how I present my findings are all aspects which influence the validity and reliability of my research project (Merriam & Tisdell, 2015, p. 201).

## 3.4.1 Reliability

Christoffersen and Johannessen (2012, p. 23) describe reliability as an indicator of how accurate and precise the data collected is. Furthermore, reliability in qualitative research indicates how consistent the research is in regard to other investigations as well (Creswell, 2014, p. 201). In other words, is it possible that other researchers can reproduce the research? According to Postholm (2010, p. 169), the method of data collection is important to consider because of the fact that the accuracy of the method contributes to the reliability of the research. If the method is inaccurate, the chance of reproducibility by other researchers may drop (Creswell, 2014). However, considering my approach to data collection in my qualitative project, the notion of reproducibility may not be as relevant. My research project is dependent on my own interpretation of the participants' realities and understandings. The authenticity of the participants' experiences is central. Because of the fact that the participants' experiences are subjective and personal, one can argue that reproducibility is not an essential criterion for the reliability of the study (Postholm, 2010, p. 169). Besides, too much emphasis on reliability can hinder creative thinking and variation (Kvale, Brinkmann, & Torhell, 2009, pp. 263-264).

Using interviews as a qualitative data collection method will arguably always involve a certain degree of subjectivity, where also my own interpretation and analysis affect the reliability of the study (Postholm, 2010, p. 169) It is therefore important to separate between my own interpretations and the participants' interpretations. To obtain complete reliability in qualitative research is therefore arguably neither possible nor desirable (Kvale et al., 2009;

Postholm, 2010). Nevertheless, I have attached my interview guide in order to provide more insight into how I investigated differentiated instruction. This guide displays how I approached the investigation of differentiated instruction, and by attaching my interview guide it is possible for others to carry out similar studies, or draw ideas from the approach.

A potential disadvantage with interviews as a data-collection method is that the informants may not be entirely truthful. For example, participants may want to avoid a question by giving a more general answer to how they differentiate instruction. This is an evasive response strategy. Such strategies can be used if the participants lack knowledge or experience regarding a certain topic. Alternatively, the participants provide answers that they believe the researcher wants to hear. Another aspect that may affect the quality of the information gathered is the participants' memory. The participants may not remember a situation exactly as it happened. In order to answer the question, the participants might provide false information. In addition, if the participants have a certain perception of the researcher where they feel like their answers might be disapproved, they may want to withhold important information in the fear of being wrong. These are some aspects that may occur in any interview conducted, and are therefore important aspects to consider in regard to reliability (Galletta, 2013, pp. 48-49). However, I have no reason to assume that such factors have played any major role in my interviews.

## 3.4.2 Validity

Validity indicates whether the research method investigates what it intends to investigate (Postholm, 2010, p. 170). One can separate between *internal validity* and *external validity*. Merriam and Tisdell (2015, p. 205) state that internal validity encompasses how the research findings match reality. External validity encompasses how the findings of one study can be applied to other situations (Merriam & Tisdell, 2015, p. 254).

There are several approaches to consider in order add validity to the research (Merriam & Tisdell, 2015, p. 207). The approaches vary depending on the research project. Merriam and Tisdell (2015, p. 206) argue that one can be more connected to reality by interpreting the data alone as I have done, instead of using any data collection instrument. However, a completely objective reality cannot be achieved through qualitative research. Nevertheless, it is possible to add validity to the study, and Creswell (2014, pp. 201-203) recommends the use of several methods in order to do so.

Triangulation is a method often used in order to add internal validity to a study. It involves using multiple methods or sources to collect data on the same topic (Creswell, 2014, p. 201; Merriam & Tisdell, 2015, pp. 206-207). I applied triangulation as I collected data from several different sources to ensure that the data I collected would originate from people with different perspectives. The participants that I interviewed had different experiences and understandings of differentiated instruction. In order to further add validity to my study, I made sure that the participants and I had the same general understanding of the principles of differentiated instruction. Therefore, I presented the participants with two definitions of the concept found in NOU2016:14 (2016) and Tomlinson and Imbeau (2010) at the beginning of the interview (see section 1.1). It is not uncommon for participants to interpret and use terms differently, which can cause a situation where my interpretation and understanding differs greatly from the participants' interpretation and understanding, which consequently may lead to low validity (Tjora, 2012, pp. 117-118). The internal validity of the study is strengthened by ensuring that the researcher and the participants have the same understanding of a topic (Evers & de Boer, 2012, p. 20).

Another approach I tried to take advantage of in order to add validity was to use a rich description of my findings, i.e. provide the reader with several examples, quotations, and different perspectives in order to make the results more evident (Creswell, 2014, p. 202). I attempted to use as much of the data collected as I could in my findings in order to make the results richer in description and more realistic in regard to reality.

In addition, self-reflection around the research project is important as it creates an open and honest narrative of the study (Creswell, 2014, p. 202). Merriam and Tisdell (2015, p. 210) emphasise the importance of explaining ones own biases and assumptions concerning the research. This is done in order to clarify how my own interpretation of the findings is shaped by my worldview, culture, socioeconomic background, and my experiences (Creswell, 2014; Merriam & Tisdell, 2015). The research's position, or *reflexivity*, is important as it encompasses how I as the researcher affect the research and how the research process affects the researcher. This is particularly important because of the fact that I am the sole researcher, so the interpretation is done by me unaided. By thoroughly describing how I collect and analyse the data, I will argue that my biases and assumptions affected the result in limited manners. Nonetheless, by describing certain assumptions, experiences, and worldviews, the reader can get a sense of what factors which could have influenced my research (Merriam & Tisdell, 2015, p. 249).

An aspect of the data collected that is important to comment on concerning the validity of the study, is the fact that I conducted the interviews in Norwegian and translated them into English. As mentioned in section 3.1.1, the participants' intended meanings are essential in qualitative phenomenological research. By translating the data collected from Norwegian to English, there is a risk that the intended meaning may get lost in the translation process. The transcription process, the analysis, and coding of the transcripts, were done in Norwegian. However, the data that has been translated are limited. By staying with the original language as long as possible, I will argue that I have reduced the potential limitations concerning validity (van Nes, Abma, Jonsson, & Deeg, 2010).

My research project includes a limited number of participants. I purposefully selected the participants based on their teaching background and experience. Because of that fact, I cannot generalise my results. I can only present the participants' experiences, and discuss the results from the participants' perspective. The value of qualitative research lies with the participants' experiences and interpretations. Besides, considering the value of qualitative research, generalisation is neither achievable nor necessary. However, one can add external validity to the study by connecting the data collected to the data of similar studies, or to theories and relevant scientific ideas (Creswell, 2014, pp. 203-204; Gibbs, 2008, p. 100; Merriam & Tisdell, 2015). I have done so by connecting my findings to relevant theories and concepts regarding differentiation instruction as described in Chapter 2.

## 3.5 Ethical considerations

Ethical considerations are important to discuss and review in any study. The ethical issues one may face are extensive, and may appear in all stages of the research process (Creswell, 2014, p. 92). Christoffersen and Johannessen (2012, p. 47) support the notion that the researcher must always maintain high ethical standards in relation to the participants' autonomy and self-determination. Furthermore, it is the researcher's duty to respect the participants' private information by e.g. anonymising the participants, as I have done. The National Committee for Research Ethics in the Social Sciences and the Humanities (NESH) provide guidance and advice for ethical considerations in research projects (NESH, 2016). While guidance and advice are helpful, it is ultimately the researcher and research institution that are responsible to ensure that the research conducted is aware and respectful of the ethical considerations (NESH, 2016, p. 5). NESH (2016, pp. 12-23) incorporate several aspects concerning ethical considerations. These aspects range from storage of data to the respect of the participants'

privacy, as well as considering the importance of the researcher's responsibility in association with the participants.

In my research project I expected several ethical dilemmas to arise throughout the project. Because of the fact that the data collection method of my research project is interviews, I am connected to participants in one way or another. The participants' autonomy, integrity, dignity, freedom, and right of co-determination are essential and must be respected (NESH, 2016, pp. 12-13). I anonymised the research material and personal data that I collected in order to protect the privacy of my participants. I also made sure to provide the participants with as much information about the project as I could. This was done in order to make sure they knew the implication their participation would have, and that they could withdraw from the study at any time. Moreover, I contacted NSD in order to further protect the privacy of the participants. Because of the fact that this project is done through an educational institution, the project has to be approved by NSD (Christoffersen & Johannessen, 2012, p. 47). As mentioned, the NSD approval form can be found in Appendix 1.

In addition, I used tape recorders in all the interviews, as this would make transcription of all the data possible. These recordings include both voices and possible private information that could compromise the privacy and anonymity of the participants. Therefore, all the tape recordings have been stored in a secure locker at campus. The interview transcripts were stored on a memory stick which, when not in use, was also stored in a secure locker.

# 4 Research findings and analysis

I will in this chapter present my research findings. Moreover, I will connect the findings to the theoretical framework used in the thesis in order to analyse it. The findings are sorted into the different categories which I established in the methodology chapter. The findings will be divided into sections based on the four categories: differentiation through content, process, product, and affect/environment (section 4.1); differentiation according to the students' readiness, interests, and learning profile (section 4.2); differentiation and the teachers' working conditions (section 4.3); and challenges regarding differentiated instruction (section 4.4). I will use a number of citations from the participants in my analysis. The English citations used in the analysis are all my translations given that the interviews were carried out in Norwegian, as explained in section 3.4.2.

# 4.1 Differentiation through content, process, product, and affect/environment

Content, process, product, and affect/environment are the elements across which teachers can differentiate, according to Tomlinson (2017, see section 2.3.2). I will in this section focus on how the teachers differentiate their instruction across the aforementioned elements.

## 4.1.1 Content

The teachers all differentiated content in some manner. They have similar approaches to their English lessons where they plan content beforehand, before contemplating how to ensure that the content is appropriate for the students.

Karen said, "The goals for the students are the same, so differentiation happens more on a detailed level where I think about, 'okay, how can the students work in order to reach these goals?' for example". Karen exemplified her experience with differentiating content by saying that she often gives different assignments to certain students, or she can change the phrasing of the assignment. However, she does not necessarily plan for differentiation at all times as some of the activities are improvised in the classroom. Karen claims that if she sees the need for differentiation, she can make adjustments while the lesson is proceeding. Jane uses the same approach, where she alters the phrasing of the assignments or makes other adjustments throughout her lessons. These strategies are congruent with Tomlinson's strategies for differentiating content (Tomlinson, 2017; see section 2.3.2).

Michael had a more unique working situation than Karen and Jane. At the most he had 13 students present in his English lessons. However, one hour every week, his English lessons

consisted of only three students. Michael uses his students as a resource when differentiating content - often in the smallest group consisting of only three students. Michael said:

I think it's boring for the students to work alone all the time, so they often work together all three. With Mia [one of the three students] being so bright, she loves it when she can teach the other two something. I think it benefits all three of them.

Using peers as mentors, such as Mia in this particular situation, is a strategy that can give everyone a chance to learn more and also contribute to each others' learning, as explained in section 2.3.2. This is an interesting strategy to see in relation to ZPD, which emphasise the use of a capable peer in learning and development processes. On the other hand, Michael also stresses the challenges he encounters when he is planning content for the smallest group. These challenges are e.g. the diversity of the students' needs and interests. These challenges will be discussed further in section 4.2.2 about the students' interests, and in section 4.4 concerning challenges in general.

As mentioned in section 2.3.2, minilessons and different presentation/phrasing of content can be effective strategies for differentiating content. Jane, being one of two teachers in her English lessons, frequently uses these methods. She stated:

This year we are focusing on literature, and we are reading *Lord of the Flies* and *Animal Farm* and those types of books. However, we observe that some students do not respond at all when we are discussing the books together. We therefore use groups, and in one of the groups we see the need to adjust our vocabulary and even use Norwegian at times as part of the adjustment. We have to do it to make them understand.

In this example, Jane is using organisational differentiation by providing the separate groups with minilessons and different phrasing content (see section 2.2; 2.3.2) In these situations, Jane appreciates being two teachers present in the classroom. One can argue that minilessons as a method to differentiate content is easier to use when there are two teachers present. Naturally, teachers can use this method alone as well, but it is arguably more challenging in regard to planning and organising.

As we have seen, all teachers differentiate content in some manner. What I find most interesting here is that differentiation of the content is not necessarily planned. It seems as if content differentiation often happens while the lesson is proceeding, and is triggered by the teachers' observations in the classroom. If the teachers observe that the content is not comprehensible for the students, they can differentiate accordingly. The teachers seem to continuously adjust the content for the students so that may work with content that is more

related to their potential development level. This is relatable to the concept of ZPD and how teachers can differentiate according to the current developmental levels of the students, as explained in section 2.3.4.

## 4.1.2 Process

The most interesting aspect of the teachers' answers regarding process, i.e. sense-making activities, was the fact that they all had the students' preferences in mind. Keeping the students' preference, interest, readiness, and learning profile in mind is, as we have seen, a fundamental feature of differentiated instruction.

Karen stated that, "Being a teacher for 21 years, and often teaching the same students over a longer period of time, I think I gained a certain knowledge of how to read my students, what they stand for, and how they learn". Moreover, she stated that she often tends to alter her plan, depending on the situation and mood in the classroom. Being able to lead and manage students in the classroom is imperative concerning differentiation (Tomlinson & Moon, 2013). Karen therefore trusts her teaching experience and teacher-student relation when organising activities. Karen said that she makes adjustments here and there depending on the students. She stated, "If I know there is a student who is very nervous and not especially good at speaking English, I try to give him easier assignments". This method is comparable with tiered assignments (see section 2.3.2) where the assignments are the same, but presented with different difficulty levels.

Jane also uses tiered assignments. Jane was very particular in choosing activities based upon the students' preferences. She stated, "If we use in-depth texts as an example. I always give them several choices, and sometimes make adjustments, both for the strong students and the weak, and then they can choose, for example a particular theme to write about". In this example, Jane is first and foremost differentiating content by letting her students write about a topic of their own choosing. However, she also differentiates process as the students may choose how they want to approach the text in regard to how they prefer to collect information about a topic. The students are a part of the process, and can choose based upon their own preferences, i.e. how they believe they best make sense of the content. This is in correspondence with how process can be differentiated (see section 2.3.2) and the importance of differentiating with the students' interests and preferences in mind (see section 2.3.3).

Michael did not mention any activities that could be related to tiered assignments. However, he had an interesting remark regarding why he is reluctant to giving the students different

assignments individually, especially in the smallest group of three students. He stated, "It becomes very visible when they work on such different levels... I can do it, they handle it, but I don't want them to be too aware that there is a gap between them". He stated that he would rather have them talk and discuss together, because then they all need to contribute and be a part of the conversation. He argues that it is easier for the students to make sense of the collective discussion instead of working individually, and he further argues that group discussions make the competence gap seem less visible. Michael's approach aligns with the importance of the social aspect regarding optimal learning and development, as described in section 2.3.4.

## 4.1.3 Product

The most noteworthy notion regarding the teachers' perception of product is their focus on assessment. Most of their answers related more to how they assess their students rather than how students can demonstrate what they have learned. Nonetheless, the teachers contributed with interesting views regarding assessment, which can be linked to differentiating through product.

Karen's focus concerning product is on the students' potential development level (see section 2.3.4). Karen stated that she often uses formative assessment in her English lessons. She does not mention any particular format that the students can present their product through. However, Karen's attention regarding differentiating product is on the students' progression. Karen said, "I always try to push them. I challenge them a lot by saying, 'Mark, what challenges do you have? What do you need to improve? How can you further progress?' And so on". She acknowledges that they do not always respond to her assessment, but she is persistent in her effort of giving them a goal to reach. Karen's statements imply that the students are challenged by the teacher to figure out how they can develop further. This view can be connected to ZPD regarding the current- and potential development level, and the teacher's role as a mentor. In addition, assessment which informs teaching and learning in the classroom is one of the general principles of differentiation (Tomlinson & Moon, 2013).

Formative assessment was also important for Jane. Jane said she experiences a focus shift in regard to assessment, where most of the assessment is of the formative kind. She said, "I do not focus on number grading during the semester. Of course, I have to grade them at some point, but during the semester I give them feedback on what they need to work with individually". Jane also highlights that the students need to be given ample time to work with

the feedback they get. She stated, "We will reserve one or two hours after an assessment where the students get to work with that they need". Jane thinks that the students learn more from these activities than from number grading. She also stated that the assessment formats that she uses often vary. According to Jane, discussions and debates are formats which work well in her English lessons. She said that she enjoys class/group debates, as the students seem "freer", i.e. the students are able to express thoughts and ideas without rigid frameworks. Group debates as a format is mentioned by Tomlinson (2017) as beneficial for differentiating product, i.e. how students get to present what knowledge and skills which they acquired. Additionally, class/group discussions and debates can be linked with the sociocultural aspect of learning and development (Vygotsky et al., 1978).

Similarly to both Karen's and Jane's statements, Michael's statements regarding formative assessment can be linked to how he differentiates product. Michael stated that, because he teaches a smaller group, he often applies a variety of different approaches to how the students get to demonstrate what they have learned. He said, "Sometimes it is more natural to let them do a presentation, other times we can just talk about the topic at hand". What I find most interesting about Michael's statement is that he focuses on the students' preferences. A focus on the students' preferences is what distinguishes product from other performance tasks that are less open to the students' needs, readiness, and learning profile. As mentioned, an emphasis on the learners' needs is an essential feature of differentiation (see section 2.1; 2,2).

In summary, one can argue that the teachers use formative assessment so that the students are given the chance to demonstrate how they learn and develop through the assessment. Class/group discussions and debates were the most common formats mentioned by the teachers. Nevertheless, how the teachers assessed the students became a larger topic than how the students get to demonstrate what they have learned. I believe the reason why might be because of the ambiguity of the meaning of product. It is possible that I did not sufficiently describe what the term product encompasses, which arguably is a reason why this misunderstanding happened. However, as assessment methods are closely linked to product, the teachers had valid perceptions regarding how they differentiate product.

## 4.1.4 Affect/environment

The last element that teachers can differentiate through is affect/environment. All the teachers agreed that the environment in the classroom is important for learning and development. However, what I found most interesting is that none of the teacher had given much thought on

how to differentiate through affect/environment. This was not because they did not see the importance of it, but debatably because they did not experience any major challenges regarding the environment they teach in. Michael was the only teacher who explicitly mentioned differentiation in regard to affect/environment.

As seen in the sections above, all the teachers are able to differentiate content, process, and product to some extent. I will argue that their ability to differentiate through those three aspects is possible because of the fact that they teach in environments that support and facilitate learning. For example, Michael's use of peer mentoring (see section 4.1.1), Jane's use of group discussions (see section 4.1.3), and Karen's ability to improvise her differentiation (see section 4.1.1) are perhaps possible because they have created a certain social environment and mood in the classroom. My interpretation of the teachers' statements is that they all teach in environments where the students are supported, respected, and challenged – features which are crucial concerning differentiated instruction (see section 2.3.2).

## 4.1.5 Summary

As seen in the sections above, the teachers differentiate content, process, product, and affect/environment in a certain manner. Most notable about the findings is that, with the exception of differentiation of product, their approach towards differentiation was based on the learners' needs and preferences. This aligns with the most fundamental principle of differentiation – the importance of differentiation according to the students' needs (see section 2.1).

# 4.2 Differentiation according to the students' readiness, interest, and learning profile

The aim of this section is to present how the teachers differentiate according to the students' *readiness*, *interest*, and *learning profile*. These three factors are important, as they are the ones which content, process, product, and affect/environment are differentiated according to (see Figure 1).

## 4.2.1 Readiness

The findings show that all the teachers differentiated according to the students' readiness. The teachers' answers gave an impression that indicated that differentiating according to the students' readiness was an obvious thing to do.

Michael stated, "Obviously I cannot give them all the same tasks. Even if they are just three students, they are all here, here, and here [Michael gesticulates three different levels with his hand]. Imagine how nice it would be if every one of them was at the top level?" Moreover, he stated that he believes that the students' differences need to be taken into account in his English lessons for him to be able to differentiate.

Karen differentiates according to the students' readiness as well. Her approach is a more proactive one, meaning that she always prepares her lessons contemplating different scenarios. She stated:

I make adjustments here and there. I do not necessarily plan every little detail, but I think for myself 'Do I really have activities for 60 minutes lessons which will excite the students? Is this going to work with Mary? Will Luke manage this task? In my head I believe that it will work. Obviously. In reality no, I still try, and still fail and learn, but that is teaching. The things you plan for do not always fit well with the students.

This statement is arguably a bit obvious. Understandably, not everything planned is going to progress as scheduled. Karen recognises that she has to make adjustments throughout the lesson. On the other hand, it is interesting to see that she, even with her amount of experience, acknowledges that she is still learning. It seems as Karen continuously reviews how to plan lessons that will match the students' readiness. However, she finds it challenging because of the student diversity. This supports the perception of how different the students' needs are (see section 2.1; 2.3.3).

Jane spoke about readiness from a different perspective. She spoke about how teachers need to recognise when a student is physically and mentally ready for another challenge. She said, "It is important to realise that we are working with adolescents. We are forcing them to concentrate for maybe a whole hour, or even more". She therefore made sure that the activities planned aligned with the students' readiness at the present time. Jane implemented a "pause activity" in her lessons. She argued, "By showing them a video for example, the students are given a small wake up call and is more ready to work and face another challenge afterwards". Jane's approach is interesting and can be related to the first principle in Figure 1: an environment that encourages and supports learning. Jane's experience regarding differentiation according to students' readiness arguably relates more to the students' physical readiness rather than the students' readiness relating to their intelligence, knowledge, and ability. However, if her students are engaged and motivated to learn, they will have a better chance at reaching their potential development level, as explained in section 2.3.4.

### 4.2.2 Interests

The teachers' answers gave the impression that all of them differentiate their instruction according to the students' interests in some manner. Karen, Michael, and Jane all agreed that the students' interests have to be taken into account when differentiating. On the other hand, they also stated that it is practically impossible to find something which interest and engage *all* students.

Michael stated that he often thinks about the students' interest when planning his English lesson. He said, "Well, I have fewer students, so yes, I often try to find something which I know they are interested in". He exemplified that he will let one of his students work using a computer, as Michael knows that computers is particularly interesting for this student. Further, Michael emphasises that the student appears to work harder and be more motivated when working with a computer. In this example, Michael differentiates by considering the student's interest. Interestingly, Michael's approach can also be linked with the concepts presented by Gardner (2011) and Armstrong (2017) regarding learning and development through multiple intelligences. This is because of the fact that this particular student might have a better chance of learning and developing by using different methods and intelligences to attain information. Michael benefits from knowing the students' interests, which can help him differentiate accordingly. This particular example is similar to the study conducted by Borja et al. (2015, see section 1.1) where they emphasised the benefits of the teachers' knowledge about the students' needs in order to differentiate instruction.

Karen commented on the importance of creating a lesson that is both interesting and motivating for the students. She exemplified this by describing one activity called "thinking classroom". Through this activity, the students would try to solve a problem in more untraditional ways by e.g. writing ideas on the windows, and re-arranging the classroom so they could work in different stations. In this example, one can argue that Karen differentiates both process and affect/environment according to the students' interests in order to engage them. When using this activity, Karen also focuses on topics that she knows that the students need to improve. Karen stated that the students seem more engaged and interested in their work when it applies to a subject or topic that the individual student needs to improve.

Another example Karen presented concerning differentiation according to the students' interests is to have them work using *kartleggeren.no*. Karen uses this website to make her students improve their English grammar. When the students used this method, Karen

experienced that the students often seemed quite enthusiastic and interested. The reason might be that the students saw it as an opportunity to develop and improve further, which consequently might be a reason for their interest and engagement. The students' opportunity and eagerness to improve is comparable with the concept of the potential development level and ZPD, as the teachers can motivate the students to reach their potential development level

Jane's perceptions revolved more around the challenges of differentiation according to the students' interest. She agreed that the students' interests were important, but also acknowledged that her students had a variety of interests, which ultimately made it more difficult to differentiate. These challenges will be further discussed in section 4.4. It is perhaps not reasonable to believe that a teacher can plan a lesson which will align with the all of the students' interests, however, Jane seemed to be inspired to do so. She said, "Of course I want them all to be engaged in the subject, but it is difficult, practically impossible". However, the way she differentiates content and process (see section 4.1.2) by using tiered assignments is in fact one way to differentiate according to the students' interests. Jane is giving the students the opportunity to choose the topic themselves, and it is reasonable to believe that the students will choose assignment topics based on their interest. However, this is my interpretation, because Jane did not mention any explicit method or assignment that she used in order to differentiate according to the students' interests.

## 4.2.3 Learning profile

Concerning the students' learning profile, all the teachers recognised that they have to differentiate their lessons to the students' learning profile to some extent.

Michael had interesting views regarding the different learning profiles in the smallest group that he teaches. Interestingly, he said that he often asks the students how they wish to approach a certain assignment. He stated, "When they choose for themselves, they can choose whatever they are interested in. Some like to work with computers, some like to talk and not write... some like to write, and so on". In this example, Michael differentiates the process according to the students' learning profile. If the students themselves are aware of how they prefer to acquire knowledge, Michael's approach will most likely benefit the students (see section 2.3.3; 2.3.5). However, Michael also stated that he thinks that this approach is manageable because of the few students in that particular group.

Jane and Karen focused less on the topic of differentiation according to the students' learning profile. Nonetheless, Jane mentioned something interesting regarding the topic. She said,

"Being two teachers, I often get the opportunity to speak individually with the student, or in a group. Often I see them, well someone, 'get more out' now, than if they had to write it". This is interesting to relate to the sociocultural aspect of learning and development (Vygotsky et al., 1978). In the example above, Jane differentiates product according to the students' learning profile - giving the students the chance to show her what they have learned in a different manner, based upon the students' preferences and ideas of how they best acquire knowledge (see section 2.3.2).

## 4.2.4 Summary

The findings show that there was a consensus amongst the teachers that differentiation according to the students' readiness, interests, and learning profile is important and necessary in the English classroom. Interestingly, while the teachers did differentiate with the students' needs in mind, they did not seem aware of the degree to which they differentiate. While one can argue that the findings show that differentiation according to the students readiness, interests, and learning profile occurs - it is perhaps more due to the teachers' idea that this is "common sense", rather than any awareness of the principles of differentiated instruction in the classroom (see section 2.1; 2.2; 2.3).

## 4.3 Differentiation and the teachers' working conditions

All the teachers who participated in my study practiced in varied working conditions. The aim of this section is to examine how *working conditions* as a factor affected the teachers' ability to differentiate instruction.

## 4.3.1 Differentiation and the two-teacher system

One of the questions I asked in the interview was, "In your English lessons, do you work alone or do you have other teachers in the classroom with you?" Two of the three teachers answered that they teach mostly unaccompanied in the classroom. However, Jane answered that she is never alone in her English lessons. Jane said, "We always have two teachers present in the classroom. This is because we follow the 'two-teacher system' in English, Mathematics, and Norwegian which allows us to follow up on the children who needs it". Jane highlights the advantage of being two teachers:

We have learned to get to know each other, and each other's strengths. This means that I can walk around the classroom and speak to each individual student. After a test for example, I can give them a thorough formative assessment, either in the classroom or in a group room, while still knowing that the other students are taken care of. This is especially nice when I have classes with 25-30 students.

Considering the importance of assessment in regard to differentiation (see section 2.3.1), the two-teacher system seems beneficial. Moreover, Jane explained that through these assessments she could give the students instruction on how to, for example, fix recurring grammar errors in the students' texts.

According to Jane, differentiation is more challenging in subjects with only one teacher present. She said, "When you are alone with 30 students the differentiation needs to happen in advance. You cannot help each and every student while the class is going on. I get more time to do that in the English subject". I found this to be particularly interesting because Jane mentioned that she does not have a lot of time to plan and prepare for differentiation beforehand. Planning for differentiation did not seem to be a priority for Jane in the English subject, because of the fact there are always two teachers present in the classroom. However, Jane emphasises the need to plan for differentiation in other subjects where she teaches alone. The challenge of differentiation and time and other resources will be further discussed in section 4.4.2.

## 4.3.2 Differentiation in smaller groups

Working at a relatively small school, Michael emphasised a close relationship between the teachers as imperative for differentiation. He said, "We are 9 teachers in the entire school. This means that we constantly know what the other person is doing, and we help each other if needed, which we often do". Support between teachers across subjects is an aspect that is comparable to the proposition presented in NOU2016:14 (2016) regarding a collective professional teaching community, as presented in section 2.1.

Furthermore, Michael stated that the teacher community that he is a part of does not always discuss differentiated instruction in regard to the subjects, but instead they focus on the importance of the social relations between the students. Michael said that the teachers at his school often reorganise the groups in which the students work as a method of differentiation. He said, "We work with a very small group of students. I often find the need to change the seating arrangement because I know some students do not work well together, even in a small group such as mine". This is particularly interesting concerning the general principle of differentiation concerning leading and managing a classroom (Tomlinson, 2017). Besides, by being familiar with his students and his student group, Michael is able to manage the classroom in a way that he believes creates the best possible environment for learning and

development (see section 2.3.2). In that way, the working conditions affect Michael's ability to differentiate

**4.3.3 Differentiation and the role of the professional teaching community** In contrast to Jane and Michael, Karen emphasises her appreciation of being independent in the classroom, especially in English lessons. She explains that they are 7 or 8 English teachers at the school who regularly meet in order to discuss curriculum, topics to include in their lessons, content and other aspects of the subject. According to Karen, these meetings are beneficial for her and they are, unexpectedly, a reason why she prefers teaching alone:

We work very nicely together, all of us. We talk about what we want to teach, and how we want to teach it. We share ideas and opinions of teaching methods, and each of us can choose for ourselves how we want to approach a lesson. Afterwards, if we for example chose different methods, we meet up and speak about 'oh, this and that worked wonderfully' and 'this and that did not work as well'. In this way we can try out different methods, and well, see what works.

By discussing the curriculum and different teaching methods, Karen can examine her own and the other teachers' experiences in order to develop, share, and improve their teaching practice. Similarly to Michael's situation, Karen's working conditions can benefit from the suggestions in NOU2016:14 (2016) regarding a collective professional teaching community. Particularly interesting is the fact that, while her colleagues provide her with several ideas regarding teaching methods, Karen acknowledges that not all these ideas are used because she believes it will not fit well in her group of students. This acknowledgement is in correspondence with the research and theory stating that students learn in different ways (see section 1.1; 2.3.5). Moreover, one can argue that this emphasises the importance of the relation between the teacher and the student, which is an essential idea of the sociocultural aspect of learning (see section 2.3.4).

## 4.3.4 Summary

The findings show that the teachers' working conditions are important factors concerning the teachers' ability to differentiate. The social environment amongst the teachers themselves and between teachers and the students are presented as important. Another notable aspect of the findings is that all the teachers value a professional teacher community. The opportunity to discuss and work together with other competent teachers is valued as a crucial factor concerning their ability and competence regarding how to differentiating instruction.

# 4.4 Challenges

I will in this section analyse the findings relating to the challenges that the teachers encountered regarding differentiated instruction. I have divided the challenges into two separate topics: differentiation and the students' knowledge gap and differentiation and resources.

## 4.4.1 Differentiation and the students' knowledge gap

All teachers agreed that a large challenge concerning differentiated instruction was the students' knowledge gap in the English subject. Karen said, "26 humans who need me, and 26 different humans who I have to take into consideration in my lessons". Michael experiences the same and argued that even with only three students in his group, the knowledge gap is a challenge for him. Both Karen's and Michael's perceptions concurs with the statement from Lightbown and Spada (2013) who emphasise that differentiation according to every single student is impossible.

Karen stated that she finds it difficult to differentiate according to the students on opposite ends of the academic level. She asked rhetorically, "What do I give to Stanley, who has an active vocabulary of 20 words? What does he receive from my English lessons?" Moreover, she contemplated what she can do for the students on the other end, "What about the students who are super talented in English, what do they get?" Michael had similar experiences, but emphasised that too much focus on the struggling and gifted students could possibly lead to the ones in the middle being in "no mans land". Both Karen's and Michael's perceptions further support most teachers' experience of differentiation as a complex approach which can be incredibly challenging because of the students' knowledge gap (Vold, 2018).

For Jane, the students' knowledge gap is most obvious when English grammar is the topic at hand. She said, "The strongest students have no problem following and engaging in my grammar lessons, but it is because they understand it. For the others, they need encouragement to even pick up their pen because they find grammar so difficult". Of course, one can argue that this challenge arises because many students arguably view grammar as both difficult and boring. On the other hand, according to Jane, the strongest students seem both interested and motivated. If the teachers were able to differentiate for the struggling students, it could arguably be interesting and engaging for them as well. The students' knowledge gap is consequently one of the reasons why Jane experiences differentiation as a large challenge.

The teachers' insights regarding the students' knowledge gap are interesting to see in relation to the Education Act (2008) which states that instruction should be adapted to all students, regardless of cognitive level. Karen highlights the students' cognitive level and the notion that students learn English differently, further adding to the notion that differentiation can be a challenging approach. The teachers' perception regarding the competence gap and the differences in learning profile is congruent with the principles of multiple intelligences (Gardner, 2011) and differentiation according the students' learning profile (see section 2.3.3).

### 4.4.2 Differentiation and resources

The teachers described resources as a challenge relating to their ability to differentiate instruction. The teachers mentioned *time*, *competence regarding differentiation*, and *support from colleagues* as the main challenges. Therefore, I will in this section define the term "resources" to include the abovementioned aspects.

The resource of time a large challenge for the teachers. Two of the three teachers emphasised that they had limited time to differentiate instruction, even if they acknowledged the importance of it. Karen in particular spoke about this challenge in more depth. She stated, "It is a typical 'teacher-complaint', that we never have time. But it is true, I have to prioritise different things in a day, and unfortunately it will affect my ability to differentiate". Karen's statement regarding time as a resource is interesting to relate to previous research on the topic. The lack of time was also an issue for the teachers in the study conducted by Robinson et al. (2014, see section 1.1). As mentioned in section 4.1.1, Karen trusts her experience and is able to improvise differentiation in the classroom to some extent. Karen's choice to improvise differentiation in the classroom is arguably necessary because she does not have sufficient time to plan for differentiation beforehand.

Concerning the teachers' competence as a resource, it is important to stress that I do not mean their general teaching competence, but rather the teachers' competence regarding the topic of differentiated instruction. Michael's perceptions regarding his own competence relate to the knowledge gap amongst the students (see section 4.4.1) and differentiation through content and process (see section 2.3.2). He said, "It almost impossible to differentiate, to find something which engages everyone. At least I find it difficult... to find a working method, because some will love it and some will hate it. There are many aspects to consider". Karen and Jane also commented on the challenges regarding the competence of *how* to differentiate.

Karen said, "To be able to differentiate for every student is difficult, but I can always improve. To help more students, right?" Arguably, one can interpret both Michael's and Karen's statements as them seeking more knowledge regarding how to differentiate. By examining section 4.2, one can see that there is evidence that the teachers differentiate their instruction in some degree. Nevertheless, given their statements above, one can argue that more competence on *how* to differentiate would make differentiated instruction a more manageable approach. Michael's and Karen's perceptions support the notion that the lack of competence is a reason why many teachers find differentiation challenging (see section 2.1). Thus, the teachers in this study experienced similar challenges as the teachers in the study conducted by Robinson et al. (2014, see section 1.1).

Finally, the teachers differentiated instruction and the challenges related to the support they receive from colleagues. This topic was interesting as it was presented as a challenge, but also as a potential advantage.

Michael and Karen, who teach mostly alone, both saw differentiation as challenging to accomplish alone, and emphasised the appreciation of being a part of a close teaching community (see section 4.3.2; 4.3.3). Karen had an interesting comment regarding the topic:

We are one school, with the same goal: we have to differentiate. This is a very nice idea on paper which all of us support. However, when you are standing there alone as a teacher you will think 'oh my god this is impossible, it is way too big, I do not know how to do this'. Something has to be done, I can change myself and my practice, but I believe a structural change needs to happen.

Karen's comment depicts a situation where the teachers agree on the importance of differentiated instruction, yet differentiation seems to happen mostly on paper rather than in practice. My interpretation of Karen's comment is that differentiation is an approach which is even more challenging to accomplish alone, and therefore she requests support and a structural change. This idea is congruent with the Committee's recommendations for a better teaching community, as explained in section 2.1. If the teacher community have limited competence on the subject, the help and support received from colleagues can also be reduced. The findings show that the teachers see the support from colleagues as a challenge, but also as a potentially large advantage depending on the teachers' and school's competence and understanding of differentiation. Similarly to Michael' and Karen' experiences, Jane experienced that a close relationship with her colleagues is important - emphasising the benefits of being two teachers present in the English lessons. However, Jane also recognised

that without the second teacher, differentiation would be much more challenging. The teachers' appreciation of support from their colleagues can be linked to the sociocultural perspectives of learning as well.

## 4.4.3 Summary

The findings show that differentiated instruction is not an easy approach for the teachers. I believe the most remarkable aspect concerning the findings is the fact that the teachers are able to perceive these challenges, not only as challenges, but also as potential opportunities. They recognise that there is a lack of competence regarding differentiation and emphasise the importance of raising the competence. Further, it is interesting to see that all the teachers value a close academic relationship with their colleagues – an aspect which further supports the importance of a competent teaching community.

## 5 Discussion

I will in this chapter discuss the concepts and theories used in this thesis in relation to my findings in order to answer my research question. In other words, I will discuss how and to what extent the English teachers differentiate their instruction and discuss how the different factors mentioned earlier affect their ability to do so. Considering the fact that I analysed and discussed the teachers' answers, the concepts, and the theories in the previous chapter, I will in this chapter focus the discussion more explicitly on answering the research question. In order to answer the research question more clearly I have divided the question into two different parts:

- 1) How and to what extent do the teachers differentiate their instruction?
- 2) How do the factors examined in section 4.3 affect the teachers' ability to differentiate instruction?

Thus, section 5.1 will include a discussion on how and to what extent the three English teachers differentiate instruction. Section 5.2 will include a discussion concerning the different factors that affect the teachers' ability to differentiate instruction, and the challenges they encountered.

# 5.1 How and to what extent do the teachers differentiate instruction?

We have seen that the teachers differentiate through content, process, product, and affect/environment according to the students' readiness, interests, and learning profile. However, the extent to which they differentiate varies greatly.

All the teachers deemed differentiated instruction as both important and necessary to implement in their classrooms. The findings show that the teachers primarily differentiate content and product. Content differentiation happened through methods such as minilessons and peer/adult mentoring, while process differentiation occurred mainly through class discussions or tiered assignments. Considering differentiation through product and affect/environment, the findings show that the teachers differentiated both aspects, but to a lower extent in comparison to content and process. Arguably, the lack of differentiation through product and affect/environment may be a result of the lack of competence concerning how to differentiate through these elements (see section 2.1). On the other hand, as seen in section 4.1.3 regarding product, the teachers focused on assessment rather than product.

Because of the fact that assessment which informs teaching and learning is a general principle of differentiation (see Figure 1), one can argue that the teachers did differentiate product to some extent. The low extent of differentiation through affect/environment is arguably because of the fact that two of the three teachers did not see much need for it, as discussed in section 4.1.4.

Nevertheless, while the findings indicate that the teachers differentiate mostly through content and process, all the teachers differentiate according to the students' needs - a quality of utmost importance in differentiated instruction. The findings show that all the teachers emphasise the importance of keeping the students' needs in mind when differentiating instruction, as reviewed in section 4.2.4. The most noteworthy aspect of the findings in regard to the students' needs is that the teachers viewed it as common sense to do so. Differentiated instruction according to the students' interests seemed particularly important, as the teachers believed that students who are both inspired and interested in what they do would ultimately learn more from the lessons (see section 4.2.2). Further, the teachers tried to differentiate according to the students' learning profile. However, as seen in section 4.2.3, the teachers emphasised the challenges of differentiating according to students' learning profile. These challenges occurred mainly because of the diversity of how students acquire knowledge (see section 1.1; 2.3.3; 2.3.5).

# 5.2 Which factors affect the teachers' ability to differentiate instruction?

The findings in section 4.3 show that the teachers' working conditions were a factor that affected their ability to differentiate. In section 4.4 I presented the different challenges that the teachers encountered in regard to differentiated instruction.

The findings show that all the teachers commented that the working conditions affect their ability to differentiate instruction. The most notable aspect regarding their working conditions was the social aspect. All the teachers emphasised their appreciation of working in a close community, and the findings show that this community of teachers affected their ability to differentiate. To be able to share ideas and receive support and help from colleagues were factors that were greatly valued by all the teachers, and they emphasised that differentiation was easier to manage when working together. Jane, who is practicing within a two-teacher system, also valued teamwork and commented that it made her approach to differentiation more manageable. In addition, the findings show that all the teachers commented on the

difficulties of differentiating instruction to a large number of students. A professional teaching community could arguably limit the challenge, as the competence of *how* to differentiate instruction would be higher amongst the teachers.

The teachers described the students' knowledge gap and the lack of resources as factors which greatly affect their ability to differentiate. The teachers' perceptions of the challenges regarding differentiation and the students' individual differences are common perceptions - especially for language teachers, as mentioned in section 2.1 (MacIntyre et al., 2016; Vold, 2018). The results are interesting to relate to another challenge that the teachers encountered: the teachers' lack of competence regarding the topic. Prior research on differentiated instruction (see section 1.1) show that many teachers lack competence of how to differentiate instruction. The findings in this study are consistent with the prior research. By increasing the competence on how to differentiate instruction, one could arguably diminish the other challenges that the teachers encountered concerning the students' knowledge gap and their individual differences. Further, with more competence and knowledge concerning how to differentiate, the challenge concerning the lack of time could arguably also be reduced.

## 6 Conclusion and outlook

This study has provided further insight into the topic of differentiated instruction. As seen in this thesis, differentiated instruction is considered to be both valuable and challenging for the teachers. There is evidence that the teachers differentiate instruction to different extents, and they recognise that there are several factors that affect their ability to successfully differentiate instruction in the English classroom.

As stated earlier, there is no formula for a differentiated classroom (Tomlinson, 2017). Teachers will arguably always encounter challenges in their attempts to differentiate instruction. However, there are possible solutions to some of the challenges, which can make differentiated instruction more manageable. The findings in this study show that all the teachers value a close teaching community. The professional teaching community can possibly provide a solution to the issue of time and competence regarding how to differentiate instruction. The teachers interviewed here all seem to welcome such a change in order to raise both their colleagues and their own competence about differentiated instruction – which is a central suggestion presented by the Committee in NOU2016:14 (2016). By working together in such a community, one can e.g. share activities, assignments, or even entire lessons, which consequently could provide teachers with ideas regarding differentiation of content, process, product, and affect/environment. However, the concept of a collective professional teaching community must be made a part of the schools' formal organisation. A structural change with focus on raising the teachers' competence regarding differentiated instruction could consequently lead to a school and a community of teachers who understand how differentiated instruction can provide better schooling for all students (NOU2016:14, 2016). Besides, by increasing the teachers' competence, the teachers would arguably be better suited to manage the students' knowledge gap that are existent in many classrooms, and were said to be a large challenge by the participants of this study.

My suggestion for further research would be to thoroughly examine the challenges that occur in the teachers' practice of differentiated instruction. Moreover, It could be useful to carry out a similar study as this, but on a much larger scale. Furthermore, as a potential improvement of my own study, I would have liked to observe the teachers in the classroom to examine how they approach differentiated instruction in practice. It could also be interesting to study differentiated instruction from the students' point of view, in order to examine how they experience differentiation in regard to readiness, interests, and learning profile. Considering

the statement in NOU2016:14 (2016) regarding the lack of research on the effects of differentiated instruction – there are numerous interesting angles and approaches to consider in order further research this highly interesting topic.

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# Appendix 1 - NSD Approval



Norsk ▼ Kristian Granås ▼

Chat med NSDs personvernrådgivere

🖶 Skriv ut

#### NSD sin vurdering

#### Prosiekttittel

Mastergradsoppgave i engelskdidaktikk.

#### Referansenummer

144217

#### Registrert

14.01.2019 av Kristian Granås - kgr029@post.uit.no

#### Behandlingsansvarlig institusjon

UiT Norges arktiske universitet / Fakultet for humaniora, samfunnsvitenskap og lærerutdanning / Institutt for lærerutdanning og pedagogikk

#### Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)

Kristin Killie, kristin.killie@uit.no, tlf: 97794819

#### Type prosjekt

Studentprosjekt, masterstudium

#### Kontaktinformasion, student

Kristian Granås, kgr029@.uit.no, tlf: 40481818

#### Prosiektperiode

07.01.2019 - 20.05.2019

15.01.2019 - Vurdert

### Vurdering (1)

#### 15.01.2019 - Vurdert

Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet med vedlegg den 15.01.2019. Behandlingen kan starte.

Dersom behandlingen av personopplysninger endrer seg, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. På våre nettsider informerer vi om hvilke endringer som må meldes. Vent på svar før endringer gjennomføres.

#### TYPE OPPLYSNINGER OG VARIGHET

Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 20.06.2019.

Prosjektet vil innhente samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som den registrerte kan trekke tilbake. Lovlig grunnlag for behandlingen vil dermed være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

#### PERSONVERNPRINSIPPER

NSD vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om:

- lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at de registrerte får tilfredsstillende informasjon om og samtykker til behandlingen
- formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte og berettigede formål, og ikke behandles til nye,
- dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet
- lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylle formålet

### DE REGISTRERTES RETTIGHETER

Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter; åpenhet (art. 12), informasion (art. 13), innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18), underretning (art. 19), dataportabilitet (art. 20).

NSD vurderer at informasjonen om behandlingen som de registrerte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Vi minner om at hvis en registrert tar kontakt om sine rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

#### FØLG DIN INSTITUSJONS RETNINGSLINJER

NSD legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1. f) og

For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og/eller rådføre dere med behandlingsansvarlig institusjon.

#### OPPFØLGING AV PROSJEKTET

NSD vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Lykke til med prosiektet!

Kontaktperson hos NSD: Belinda Gloppen Helle Tlf. Personverntjenester: 55 58 21 17 (tast 1)

# Appendix 2 - Interview Guide

## Interview guide.

- Provide the participants with information concerning my study.
- Acquire a written consent.
- Present the participants information and definitions regarding differentiated instruction to ensure we share the same understanding of the topic.

## Introduction.

- 1. For how long have you been an English teacher?
  - a. Which levels?
- 2. What is your education background?
- 3. In your English lessons, do you work alone or do you work with others?
  - a. Do you work together in subject groups/committees?

## Differentiated instruction.

- 1. How familiar are you with the topic of differentiated instruction?
- 2. Do you consider differentiated instruction important?
  - a. Why/why not?
- 3. Do you think there is differences concerning differentiated instruction depending on what subject you teach?
  - a. Why/why not?
- 4. Is differentiated instruction a topic that your school focuses on?
  - a. Examples: In colleagues/teams, focus area.
  - b. Why/why not?

## Differentiated instruction in the classroom.

- 1. How do you approach differentiated instruction in regard to (*provide examples and ask follow-up questions when needed*):
  - a. Content

- i. Provide a definition
- b Process
  - i. Provide a definition
- c. Product
  - i. Provide a definition
- d. Affect/environment
  - i. Provide a definition
- 2. How do you differentiate according to the students' (*provide examples and ask follow-up questions when needed*):
  - a. Readiness
    - i. Provide a definition
  - b Interests
    - i. Provide a definition
  - c. Learning profile
    - i. Provide a definition
- 3. What are your thoughts on assessment and assessment methods in regard to differentiation?
  - a. Examples:
    - i. Do you use formative/summative? Why?
    - ii. Do you assess in the classroom?
- 4. What thoughts do you have concerning challenges and opportunities concerning differentiated instruction?
  - a. Challenges regarding:
    - i. Time, resources, competence, support from staff, individual differences, etc.
- 5. Are there any particular situations where you see differentiation more/less important?
  - a. Examples:
    - i. Concerning a certain topic in English?
    - ii. Concerning the number of students?
    - iii. Concerning other teachers/assistants available?

## Concluding questions.

1. Before I finish my interview, do you have anything else you wish to speak about?

- a. Or anything you would like to specify regarding your answers?
- 2. Do you have any questions to me regarding the interview or the research project?
- 3. If needed, may I contact you in the event that I need clarifications regarding your answers?

Thank the participant.

# **Appendix 3 – Interview guide (Norwegian version)**

## Intervjuguide.

- Gi informantene informasjon angående studiet mitt.
- Innhent skriftlig samtykke.
- Gi informantene med informasjon og definisjoner angående hva som menes med differensiert undervisning slik at vi har samme forståelse av temaet.

## Oppstart.

- 1. Hvor lenge har du undervist i engelsk?
  - a. Hvilket klassetrinn har du undervist i engelsk på?
- 2. Hvilken utdanningsbakgrunn har du i engelsk?
- 3. Jobber du alene eller med andre kollegier i engelskundervisningen?
  - a. Er det samarbeid i fagseksjoner?

## Om differensiert undervisning.

- 1. Hvordan ble du først kjent med begrepet?
- 2. Tenker du at differensiering er viktig?
  - a. Hvorfor/hvorfor ikke?
- 3. Tenker du at det er en forskjell mellom differensiert undervisning i engelsk kontra andre fag?
  - a. Hvorfor/hvorfor ikke?
- 4. Er differensiert undervisning noe din skole fokuserer på og arbeider med?
  - a. Eksempel: rammebetingelser som kursing, ekstra tid til differensiering og fokusområder.

## Differensiert opplæring i undervisningen.

- 1. Hvordan tilnærmer du deg differensiert undervisning med tanke på (*kom med eksempler og still oppfølgingsspørsmål når det trengs*):
  - a. Content
    - i. Gi en definisjon

- b. Process
  - i. Gi en definisjon
- c. Product
  - i. Gi en definisjon
- d. Affect/environment
  - i. Gi en definisjon
- 2. Hvordan differensierer du undervisningen med tanke på studentenes:
  - a. Readiness
    - i. Gi en definisjon
  - b. Interests
    - i. Gi en definisjon
  - c. Learning profile
    - i. Gi en definisjon
- 3. Hva tenker du om vurdering og vurderingsmetoder med tanke på differensiering?
  - a. Bruker du formativ/summativ vurdering? Hvorfor?
  - b. Vurderer du i klasserommet?
- 4. Hvilke tanker har du angående utfordringer og muligheter med tanke på differensiert undervisning?
  - a. Utfordringer som:
    - i. Tid, ressurser, kompetanse, støtte fra kollegiet, individuelle forskjeller, osv.
- 5. Er det noe spesielle situasjoner der du tenker at differensiering er mer eller mindre viktig?
  - a. Eksempel:
    - i. Angående et spesielt emne i Engelsk?
    - ii. Angående antallet studenter?
    - iii. Angående tilgangen på ekstra lærere/assistenter?

## Avsluttende spørsmål.

- 1. Før jeg avslutter intervjuet, er det noe mer du ønsker å snakke om?
  - a. Er det noe du vil presisere om svarene dine?
- 2. Har du noen spørsmål til meg om intervjuet eller prosjektet?

Takk informantene for deltakelse.	

3. Kan jeg kontakte deg dersom jeg lurer på noe angående formuleringer på svarene?