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Assessment for learning using digital tools in the English subject

A mixed methods study of pupils' and teacher' use of OneNote Class Notebook in the English subject at lower secondary school

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Abstract

This study investigates how assessment for learning can contribute to lifelong learning through the use of digital tools in the English subject at lower secondary school. The motivation of this study was to learn more about the concept of assessment for learning and how digital tools can support the concept. Our research question is as follows:

> How can assessment for learning contribute to lifelong learning with the use of digital tools in the English subject at lower secondary school?

In addition, we have two specific research questions to limit and support the research question. Our specific research questions are as follows:

> What are pupils' experiences with assessment?

> What are pupils' and teachers' experiences with feedback and self-assessment in OneNote Class Notebook?

To answer the research question and the specific research questions, we have used mixed methods that includes both quantitative and qualitative data collection methods. We gathered data through questionnaires which gave us both quantitative and qualitative data. We have also analyzed pupils' self-assessments in OneNote Class Notebook and made observations in the classroom about pupils' and teachers' use of the program in assessment situations.

Our findings indicate that both pupils and teachers at the school we carried out our research are positive about the use of OneNote in assessment situations. Pupils express that it has become easier to find previous feedback and that they use this feedback to develop themselves further. This is also something the teachers experience. Furthermore, our findings show that pupils have become more aware of their own learning and that assessment for learning helps pupils better understand their learning. The pupils' self-assessments reflect on their own learning based on three questions inspired by Hattie and Timperley's article *The Power of Feedback* (2007). The assessment practice at the school where we did our research shows signs of still being in the initial phase, for instance, through the different assessment practices among the teachers.

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Sammendrag

Denne studien undersøker hvordan vurdering for læring kan bidra til livslang læring i ved bruk av digitale verktøy i engelskfaget på ungdomsskolen. Motivasjonen for denne studien har vært å tilegne seg mer kunnskap om begrepet *vurdering for læring* og hvordan digitale verktøy kan støtte om begrepet. Til dette formålet har vi formulert følgende problemstilling:

Hvordan kan vurdering for læring bidra til livslang læring gjennom bruk av digitale verktøy i engelskfaget på ungdomsskolen?

I tillegg har vi to forskningsspørsmål for å begrense og samtidig for å støtte problemstillingen, disse er følgende:

Hvilke erfaringer har elver med vurdering?

Hvilke erfaringer har elever og lærere med tilbakemeldinger og egenvurderinger ved bruk av OneNote klassenotatblokk?

For å svare på problemstillingen og forskingsspørsmålene har vi brukt mixed methods som anvender både kvantitative og kvalitative metoder for datainnsamlingen. Vi samlet data gjennom spørreundersøkelser som ga oss kvantitative og kvalitative data. Vi har også analysert elevers vurderinger i OneNote klassenotatblokk og gjort observasjoner i klasserommet om elevers og læreres bruk av programmet i vurderingssammenhenger.

Våre funn indikerer at både elever og lærere på skolen vi forsket på er positive til bruken av OneNote i vurderingssammenhenger. Elever uttrykker at det har blitt lettere å finne frem til tidligere tilbakemeldinger og at de bruker disse tilbakemeldingene til videre utvikling. Dette er også noe lærerne erfarer. Videre viser våre funn at elever har blitt mer bevisst over egen læring og at vurdering for læring hjelper elevene i å få en bedre forståelse av læringen deres. I elevens egenvurderinger reflekterer de rundt egen læring ut fra tre spørsmål som er inspirert av artikkelen *The Power of Feedback* av Hattie and Timperley (2007). Vurderingspraksisen på skolen vi har forsket på bærer preg av at den er i startfasen, blant annet gjennom ulik vurderingspraksis hos lærerne.

Table of Contents

List of Tables

List of Figures

1 Introduction

The Norwegian Directorate for Education and Training (henceforth referred to as NDEAT) states in the core curriculum that the school shall facilitate learning for all pupils and stimulate motivation, desire to learn, and belief in mastery among pupils (NDEAT, 2017, p. 17). In other words, learning and development for pupils is a high priority for schools' mandate in society. Therefore, observing and mapping pupils' learning and competence among pupils is essential for pupil and school development. Pupils' competence shall be seen through assessment, but assessment is also an important instrument to promote learning and development.

This study investigates how assessment for learning (henceforth referred to as AfL) using digital tools can be promoted in the English subject at a lower secondary school. This chapter starts by addressing our background and motivation for this study. Further, we will discuss our contribution to the field of AfL before we introduce our research questions. Further on, the study's limitations will be presented before we present and explain the chosen digital tool for this study: OneNote Class Notebook.

1.1 Background and motivation

We wanted to use this thesis to explore the field of assessment as it will be a central part of our coming days as teachers. The past four years of teacher education have taught us theory about assessment and shown us different assessment methods. We got to try a few of these methods when assessing pupils in our practice periods. In the practice periods, we have experienced assessing pupils' final products within a topic with varying support from practice teachers. Some practice teachers guided us through creating assessment criteria and gave guidance in informing the pupils clearly throughout the process. Other practice teachers have not given any direction and left us relatively free to make assignments to assess pupils. The practice that worked best depended on several factors, such as the pupils' group, our experience with assessment, and the assessment practice at the school. However, our experience with pupil assessment in schools is that they have many expectations towards assessment and that receiving feedback can bring out both positive and negative feelings. We have also experienced a lack of focus on the given feedback from the teachers after the assessment was handed back to the pupils. We experienced teachers not prioritizing the given feedback as they often rushed over to the next topic. In addition, because of the limited time in the practice periods, it was

challenging to evaluate pupils' level of achievement and see if the assessments we gave had an effect on the pupils. Based on our experience, we agreed that formative assessment was a field we wanted to learn more about, as assessing pupils will soon be our responsibility.

Our research project is a collaboration between us as teacher students, the university, and teachers in lower secondary schools taking part in LAB-TEd. LAB-TEd is a research project led by UiT and NTNU with the aim to develop collaboration between universities, schools, and student teachers to produce practice-based, professionally-oriented research in teacher education (NTNU, 2022). We decided to focus on AfL and explore the possibilities that come along with an increased focus on feedback. In addition, we were curious if there were any digital tools that could improve and make the assessments for teachers and pupils neater and more organized. Before we met with the school in the LAB-TEd project, we found some digital tools used in relation with assessment, such as Showbie, Skooler, and OneNote Class Notebook. In dialogue with the two schools that took part in the research project, we expressed our motive to research assessment for learning. One of the schools taking part in the project had already started using OneNote Class Notebook (henceforth referred to as OneNote) as a tool for teaching and AfL at the start of the school year 2021/2022. The school had decided to focus on assessments and how the pupils could utilize the assessments to a greater degree. Before the introduction of OneNote, the teachers experienced that the pupils would quickly skim through their feedback when they received feedback, mainly caring about how they ranked rather than what the feedback said. This utilization of OneNote would entail a digital platform where feedback and assessments would be stored, enabling pupils to view and look at previously given feedback throughout the school year. In dialogue with the teacher connected to LAB-TEd, we decided that it would be an excellent opportunity for us to research AfL and for the school to get an outside perceptive on how their work in OneNote functions.

Assessment is a central part of the school and follows pupils throughout their schooling. Each pupil is entitled to receive both formative and final assessments according to the assessment regulations in the Education Act (Regulation to the Education Act, 2006, §3-2). In § 3-3 *assessment in subjects,* it is stated that assessment shall promote learning, contribute to the desire to learn, and inform pupils about their competence throughout and at the end of their instruction. The assessment field in Norwegian schools has received increasing attention over the last few decades. Formative assessment became more prominent in how the Norwegian school system viewed assessment in the late 2000s. NDEAT (2019c) introduced AfL as an area of commitment in 2010. The commitment has, among other things, contributed to an increased

focus on AfL, the assessment competence in school, and the understanding of the curriculum has elevated in the *observations on the national assessment learning program* (NDEAT, 2019c). In addition, one of the points NDEAT mentions for further development is to involve pupils to a greater extent in their learning. This commitment was initially meant to last four years but was extended to another four years until 2018. We can assume that this commitment has been involved in shaping how the new national curriculum (henceforth referred to as LK20) and competence aims have been constructed since formative assessment has a more predominant role than the previous curriculum (henceforth referred to as LK06). Numerous studies and reports have been published about the positive effect of formative assessment and how it should be practiced in schools. This focus has been present in our teacher trainer program to some degree, but we still feel that there is more to the field of assessment that could be beneficial for us to delve into before starting our practice as teachers.

1.2 Research question

Our focus on assessment for learning and digital tools has led us to the following general research question:

How can assessment for learning contribute to lifelong learning with the use of digital tools in the English subject at lower secondary school?

We want to explain our intentions further to involve lifelong learning together with AfL. This entails exploring whether AfL could lead to the ability for lifelong learning. Our understanding of lifelong learning entails the ability to develop awareness and promote long-lasting learning strategies. Moreover, to limit the general research question, we made two specific research questions that will support us in answering the general research question. This leads us to the following specific research questions:

What are pupils' experiences with assessment?

What are pupils' and teachers' experiences with feedback and self-assessment in OneNote Class Notebook?

We did not address whom we will base our research on in the general research question except that it is at lower secondary school. Therefore, we included both pupils and teachers in the

specific research questions to further specify the aim of this thesis. Since the beginning of this project, we wanted to research the pupils' view on assessment. However, we got several questions concerning the teachers' views as we started our research project. In the first specific research question, we found it necessary to explore pupils' general thoughts of assessment with and without digital tools. The second specific research question aims to explore pupils' and teachers' assessments experiences in OneNote. Including both pupils' and teachers' experiences enable us to compare their views with each other.

1.3 Limitations

Three main limitations can influence the outcome of this research study. The first limitation is that the study is based on pupils in two classes as well as teachers from one lower secondary school in Northern Norway. Carrying out the research at just one school can result in findings being colored by the assessment competence among teachers and pupils, the assessment culture at the school, or the class culture. The second limitation is our choice of a digital tool. OneNote Class Notebook was chosen as it is a program in the Office 365 package that many schools in Norway use. In addition, the program was already in use in the school where we carried out our research. We, therefore, have little knowledge of other programs that could be beneficial for the same purpose. The findings in this study might be transferable and representative of other digital tools. Lastly, to our knowledge, there is limited research done within the field of AfL with the support of digital tools. No literature focusing on AfL using digital tools in the English subject was found using the UiT the Arctic University of Norway's library database, Google Scholar, Idunn, and Mendeley. Thus, most of our literature addresses AfL and digital tools separately.

1.4 OneNote Class Notebook

OneNote is a digital notebook and note-taking application that works on most digital platforms. The application can be compared to a physical binder with a section for each school subject. The "notebooks" in OneNote can be divided into sections and pages (Microsoft, 2022). Teachers and pupils have separate access in OneNote Class Notebook (see Appendix 7 for a screenshot of the program). Teachers have access to all pupils' work in OneNote, whereas pupils only have access to their own work. Pupils get access to notebooks that teachers share

with them as well as their own space meant for notes. In addition to having access to pupils' work, teachers have their own space that only they can access. The teachers used this space to plan lessons, store assessment criteria, and keep track of pupils absent from school and the different topics they taught in the English subject. Teachers can decide if they want to distribute any of the pages stored in the "teacher only" section to the pupils. Teachers can also distribute different pages to different groups of pupils. This distribution could be done as a form of differentiated instruction, where pupils who need more challenging tasks receive them, and pupils who struggle more receive adapted tasks to their competence level.

The school where we did our research had already started using OneNote in their development work within AfL. One of the intentions behind their implementation of "My lifelong learning" in OneNote was to gather all assessments within a notebook. Gathering all assessments in one place could make it easier for both teachers and pupils to follow the development of each pupil and contribute to lifelong learning. Another intention was that teachers believed pupils would feel more ownership of their work and take more responsibility for their own learning. Before the implementation, the pupils had one notebook in OneNote for each subject. For example, in English, the subject notebook was used to do school tasks, deliver assignments, and receive assessments. As a result, the pupils got more responsibility to check the assessments, and teachers experienced that once the assessment was read, it was never looked at again.

Today, each pupil at the school has access to a notebook called "My lifelong learning" in addition to one notebook for each subject. The notebook "My lifelong learning" aims to gather pupils' self-assessments and assessments from teachers to follow their development in each subject. In addition to a section for each subject, sections are *midterm assessment*, *social competence*, *development talk*, and *the life after lower secondary school*. This notebook was meant to be an archive, primarily for feedback throughout the pupils' time in lower secondary school. The role of the English notebook has become frequently used to do classroom tasks. Additionally, pupils still get instructions related to assignments and hand them in in the subject notebook. After receiving feedback on an assignment, the pupils are asked to write a self-assessment in "My Lifelong learning" and copy the teacher's feedback to the same page. In addition, the teachers at the school have created shared pages they called "ressursbank". Pupils can access these pages to look at commonly misused grammar. The pages, however, are used mainly by English teachers when correcting pupils' work. The pages can be linked to in Word documents, where pupils get directed to sections in OneNote about specific grammatical features. It is essential to state that this is the first year the school has used OneNote

systematically to work with a focus on AfL with "My lifelong learning". OneNote stores files in OneDrive, which is Microsoft's cloud storage system. An advantage of files being stored in OneDrive, is that they can be access both at school and as at home.

1.5 Contribution to the field

Most of the earlier master theses that focused on assessment concentrated on the teachers' experience with assessment. This made us curious about the pupils' experience with formative assessment, especially when using digital tools. Unfortunately, research on AfL with digital tools and literature on using digital tools in formative assessment in the English subject appears to be limited. Our contribution to the field will be to provide information about how AfL through a digital tool is perceived by pupils and teachers at one Norwegian school. We hope that the findings in this thesis can be transferred to other schools that want to use digital tools in their work with AfL. In preparation for this project, we have read literature and research we found relevant within the field of AfL.

1.6 Outline

Chapter 1 presents the background and motivation for this thesis. Further, we present our research questions before moving over to the study's limitations. Moreover, OneNote Class Notebook and our contribution to the research field are presented.

Chapter 2 presents the theoretical framework, which focuses on assessment, assessment for learning, self-assessment, AfL in Norway, as well as assessment with digital tools.

Chapter 3 clarifies the methodology used in the thesis. We will first present our research design and research strategy. Further, we will describe the methods of data collection and how the data are analyzed. Lastly, we will reflect on the quality of the study, considering reliability, validity, transferability, and ethical concerns.

Chapter 4 presents findings from questionnaires, pupil texts and observations are presented using diagrams, figures, and tables.

Chapter 5 will provide a discussion of our findings in relation to the theoretical framework with the aim of providing an answer to our research questions.

Chapter 6 present a conclusion of this research and recommendations for future research.

2 Theoretical framework

This chapter will present the theoretical framework used in this study. Then, we will describe assessment in general and relevant elements within the field of assessment. Further, in 2.2, we will provide relevant literature about the term "assessment for learning" and self-assessment, and lastly, we will refer to the assessment for learning practice in Norway.

2.1 Assessment

Assessment, in general, is a term that is understood in various ways by different participants in the school system. This results in a diverse application of how individuals and schools interpret assessment. Teachers and pupils will encounter many forms of assessment during a typical school day. These encounters can vary from short oral feedback in the classroom to giving or receiving a grade (Bøhn, 2020, p. 268). Bøhn (2018, p. 231) defines assessment as "gathering information about pupils' learning to make judgments about that learning". This definition highlights that assessment is a process and not a one-time occurrence completed with one specific method. It also links to how pupils are acquiring knowledge and skills. Munden and Sandhaug (2017, p. 121) define assessment in English as "making sure that learning happens, as simple and complicated as that".

The purpose of assessment is to encourage learning and provide a desire to learn (Regulation to the Education Act, 2006, § 3-3). It is common to divide the term assessment into formative assessment and summative assessment. It is stated in the Education Act (2006) that pupils shall receive both summative and formative assessments as it improves the pupil's learning and development. Summative assessment informs the pupil about their competence level at the end of the instruction/term in a subject. Schools do not have to grade all of the pupil's work but are required by law to give pupils two grades during a school year. These grades are required to be handed out at midterm and end of term (Burner, 2018; Johannessen (Host), 2021). According to Andreassen and Tiller (2021, p. 145), a final assessment is always summative, but a summative assessment is not always absolute. Summative assessment can also be given at midterm, after mock exams or assignments, as it informs the pupils about their competence when the assessment is distributed. Summative assessment can also be understood as assessment *of* learning, while formative assessment can be understood as assessment *for* learning (NDEAT, 2019c). Unlike formative assessment, summative assessment aims to

promote development, support the pupil, and focus on the future (Andreassen & Tiller, 2021, p. 144). Burner (2018, p. 249) argues that if the purpose of assessment is to promote learning, it is formative assessment. Both summative and formative assessments can include elements of each other.

Schools need to ensure that the quality of assessment is good, as poor assessment quality would affect pupils' learning ability (Bøhn, 2018, p. 231). Therefore, teachers need to accomplish a fair and suitable assessment practice. A way to improving the assessment's reliability and validity among teachers is to develop a shared assessment culture between them (Bøhn, 2018, p. 236; 2020, p. 272). They need to know why, what, and how to assess in a given situation, and they also need to know about different types of assessments and how to use them. This all amounts to being familiar with the regulations of assessment and competence aims in the subject (Bøhn, 2020, p. 269).

2.2 Assessment for learning

The term *assessment for learning* came to life in the 1990s as a requirement from the Assessment Reform Group to clarify that formative assessment was something more than an assessment point in the teaching or a test result (Gamlem, 2022, p. 25). One of the challenges with the term formative assessment was that the term did not have a common understanding among teachers, schools, and researchers, which resulted in that formative assessment being defined in many different definitions and various purposes. Gamlem adds that national and international studies highlight a need to increase formative assessment and feedback quality and use in learning situations. Nowadays, the terms formative assessment, AfL, and continuous assessment are often understood as one and are used interchangeably (Andreassen & Tiller, 2021; Bøhn, 2018; NDEAT, 2019c). This is also our understanding of the terms. This thesis will use the term assessment for learning mainly because NDEAT often uses the term in literature and in conversations with the school or the university. However, the terms formative assessment, AfL, and continuous assessment will also be used depending on which term the literature use.

'Feedback' is another essential and central term within AfL that must be clarified. Hattie and Timperley (2007, p. 102) define feedback as "information provided by an agent (e.g., teacher, peer, book, parent, experience) regarding aspects of one's performance or understanding". This

thesis interprets feedback as written and oral feedback from teachers to pupils. Feedback is frequently given in classrooms and can transpire in different ways. It can be provided through body language and oral and/or written feedback. Asking pupils why feedback is important to them, the majority would answer that it is important as they want to know how to improve to do better next time (Hattie & Yates, 2014, p. 64). Gamlem (2022, p. 21) adds that feedback needs to contain a message that leads to reflection that increases the quality, development, and understanding, to improve the pupil's learning. It is also important that the receiver experience that the information from the feedback will lead to new or extended understanding. The utility value of feedback would be in relation to what the receiver experiences as useful information and if the pupil value the feedback enough to invest further effort. Brookhart (2008, p. 2) divides powerful feedback into a motivational factor and a cognitive factor. Pupils who understand what to do and why are likely to feel control over one's own learning, referred to as the motivational factor. The cognitive factor concerns giving feedback that makes pupils understand where they are in the learning process and what they have to do next.

Gamlem (2022, pp. 35-36) argues that if teachers are aware of the purpose of the feedback, it will increase the quality of the feedback. For example, teachers could ask themselves which feedback they will give, why the pupils seek feedback or if the pupils use the given feedback, and why they do not use it. Pupils learn through an individual-specific and detailed assessment that can support them (Gamlem, 2022, p. 36). Black and Wiliam (1998b) carried out a meta-study of 250 studies that clearly showed the advantages of working with formative assessment. The study showed, among other things, that frequently working with formative assessment reduces the gap between high and low achieving pupils' learning outcomes, and it would raise achievement goals and final grades. Frequent feedback help pupils who are considered low achievers more than other pupils. Hattie and Timperley (2007) argue that feedback is more effective when based on what pupils have done that is correct and changes from previous work, rather than pointing out what is incorrect in their work. They also argue that feedback has a great effect when a learner expects to get a correct response, but it turns out to be incorrect. Another aspect that influences pupils' learning from assessment and feedback is their competence to seek feedback and how it could support their learning (Gamlem, 2022, p. 62). According to international studies regarding assessments in school, the relation between teacher and pupil and the assessments regarding the pupil's learning process is most effective on the pupil's development (Black & Wiliam, 1998a; Hattie & Yates, 2014).

The diversity in school calls for a need for teachers who can adjust the feedback for each pupil. This regards the successful pupil, the pupil who struggles, and the "regular" pupil. some pupils experience success in the classroom and are engaged in their learning. These pupils will go through assessments for information that will benefit them as they are motivated by having control of their own learning and development (Brookhart, 2008, p. 97). Even though the successful pupils are engaged, they benefit from feedback that tells them what is good, why it is good, and make suggestions for further development. "No matter how successful a student is, there is always more that can be learned" (Brookhart, 2008, p. 99). On the opposite side, there are pupils who find school challenging. There are multiple reasons why some pupils struggle in school, such as lack of learning skills required to process information, poor prior learning experiences, or struggle to understand assignments or feedback (Brookhart, 2008, p. 99). These pupils will benefit from feedback that lets them see the connection between the process and their achieved result. In addition, to help pupils who are struggling, teachers can focus on feedback that tells the pupils what they are doing instead of telling them what they did not do. Brookhart (2008, p. 102) mentions some feedback strategies that can help pupils struggling with English, such as using simple vocabulary, suggesting small steps for improvement, and checking if the pupil understands the feedback.

Assessment of pupils' work and progress is a recurring theme, and finding well-suited assessment methods that engage pupils for further learning is challenging. Hattie and Timperley present three questions (see *Figure 1*) that can be asked by a teacher and/or a pupil that characterize effective feedback in their research article *The Power of Feedback* (2007): "*Where am I going?*", *"How am I going?"*, and *"Where to next?"*. The first question refers to the goals of education. The second question addresses the progress being made towards the targeted goal, and the last question refers to the activities that need to be done to improve the learning progress. How effective these questions are depend on teachers' and pupils' understanding of the task, the level of the feedback, and the self or personal level.

Hattie and Timperley also present four levels of feedback (see *Figure 1)*, where each level of feedback influences its effectiveness. The first level is feedback about the task, which determines whether the task is correct or incorrect. Feedback about the task is more effective when it refers to errors rather than focusing on missing elements in the task. The second level regards task processing to create or finish a product. This kind of feedback applies to information about the environment and relationships. The third level is feedback about self-regulation and includes the person's commitment, confidence, and control in the act altogether.

This could be done by giving feedback about something that could engage continued work effort. An important aspect of self-regulation is the pupil's capability to seek help. The last level is feedback about the self, which does not focus on the task, but more on a personal level, for example, "you are a good girl". These four levels of feedback turn out to have a different impact on pupils' learning. Hattie and Timperley argue that feedback about the task is apparent when feedback helps increase self-regulation or improve the process. Feedback about self-regulation and the task process distinctly affect mastery of tasks and process work. On the other hand, feedback about the self is the least effective type of feedback but is highly represented in the classroom. According to Hattie and Yates (2014, p. 65), pupils tend to be future-focused. That does not mean they are not aware of past performance or products produced, but that they want to focus forward on how they can improve their work. However, pupils do not want critique as feedback as they are sensitive to the feedback they find personal, hurtful, or unnecessary. At the same time, teachers need to point out errors pupils make to help them improve their work. That is also what pupils expect of teachers. Hattie and Yates add that even if teachers intend to give critical and helpful feedback, the receiver could understand it as a personal attack rather than what the intention was.
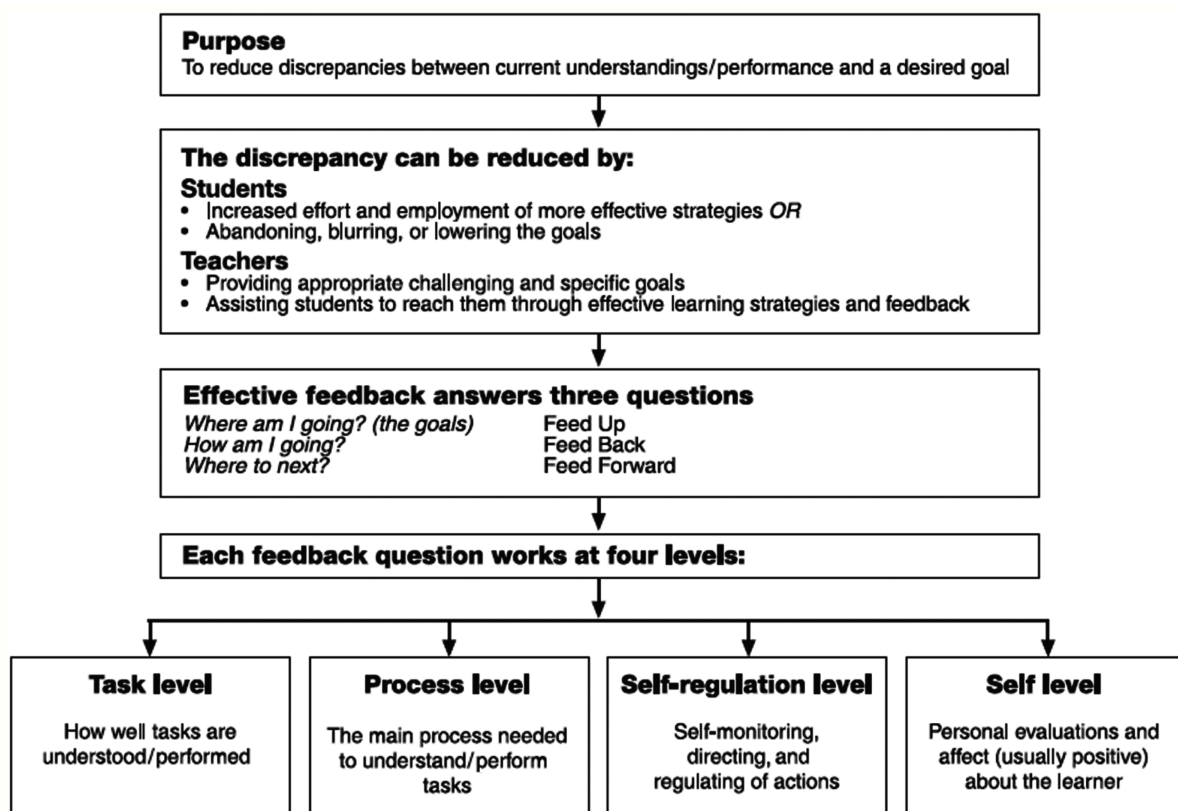

Figure 1 - A model of feedback to enhance learning

From "The Power of Feedback" by J. Hattie and H. Timperley, 2007, Review of Educational Research, 1, p. 87. Copyright 2007, Thousand Oaks, CA: SAGE Publications.

Gamlem and Smith's (2013) article *Pupil perceptions of classroom feedback* presents two understandings lower secondary pupils in Norway have on feedback based on teachers' practices. The first understanding concerns that it is not given enough time for the pupils to work with feedback at school and that the feedback seems to be forgotten as the teacher does not follow up on the given feedback. This understanding of feedback makes pupils feel "useless" and is understood as negative feedback. The second understanding of feedback is the opposite of the first. It is given time to work with the feedback, and the teacher follows up on the feedback. Thus, Gamlem and Smith state that the power of feedback depends not only on how and when feedback is given but also on how and when feedback is received. Giving feedback within an amount of time so pupils have the time to correct themselves and can identify what to do in tasks following is useful feedback (Gamlem, 2022; Hattie & Timperley, 2007).

2.2.1 Self-assessment

Self-assessment concerns the pupils' ability to assess their efforts and reflect on how they learn in different situations in the English subject (Munden & Sandhaug, 2017, p. 127). Munden and Sandhaug further state that one needs to learn how to assess everyday learning situations and get experiences before assessing and reflecting on how one learns in general. Self-assessment can also be understood as assessment *as* learning. Burner (2018, p. 250) supplements that self-assessment leads to awareness of one's strengths and weaknesses through reflections on one's learning. The reflection of this learning can lead to pupils becoming more conscious and responsible of their learning process. Pupils review their own learning strategies, learning process and learning output during self-assessments. Imsen (2020, p. 498) supplies that the purpose of self-assessment is that pupils shall practice becoming independent and learn to be critical to own learning in a healthy way. However, the pupil's maturity plays a part in their ability to understand what is considered good or bad in their work. Self-assessment must therefore be in light of the competence aims as they contribute to awareness of what the competence aims mean in practice.

Self-assessment among second language pupils has some pitfalls that teachers should be aware of (Burner, 2018, p. 250). Self-assessment can, among other things, prevent the pupil from participating spontaneously in the teaching, and teachers should therefore think about when to let the pupils assess themselves. This could be that the pupils are afraid of doing language mistakes when speaking. Teachers should therefore balance of pupils reflecting on their

language learning and spontaneously acquiring the target language. Hattie and Timperley (2007, p. 94) state that self-assessment is one way for the teacher to select information through pupils' self-regulation. Self-assessment will help teachers provide adapted feedback. To support and improve pupils' feedback practice, the teacher must learn how to understand the pupils' barriers related to feedback and how to develop the pupil's self-regulation and expectations of their own work (Gamlem, 2022, p. 62). Self-assessment requires the pupils' ability of metacognition (Imsen, 2020, p. 498). It is, therefore, part of a cognitive process. An example is that children tempt to believe that everything they do is good. The disadvantage is that self-criticism can take over and decrease pupils' motivation.

Several aspects interact with each other in order to succeed in language learning. The input of target language, high motivation, explicit language instruction, and the teacher's skills and dedication are such aspects (Haukås, 2018). Another aspect that has been pointed out is the language learner's metacognition. As a result, metacognition has received increased attention both nationally and internationally. The Organization for Economic Co-operation and Development (OECD) points out the importance of metacognition in a fast-changing society (OECD, 2005). Further, they argue that this ability is one of the main competencies we should focus on in the 21st century. This ability is also specified in national governing documents. Haukås (2018) states that it is appropriate to define metacognition in relation to education as: "awareness of and reflections on own knowledge, abilities, and learning" (Haukås, 2018, p. 69). This definition resembles the understanding of metacognition in a report by Official Norwegian Reports (NOU) about the school of the future: "Metacognition is the term used when pupils are able to monitor and reflect on the purpose for what they are learning, what they have learned, and how they learn." (NOU 2015: 8, p. 10). Despite the curriculum in English not explicitly mentioning metacognition, the curriculum emphasizes metacognition indirectly. The curriculum underlines that pupils shall be conscious of their learning in terms of what they know and how they progress in the subject.

Tobias and Everson (2002) specifically link metacognition to learning and describe it as the ability to monitor, plan, and evaluate one's learning. In addition, they indicate that reflection about what a pupil knows and does not know is important to know what needs to be learned and which goals to aim for. Studies show that active metacognitive pupils are better equipped to manage a learning situation and use their own strategies more frequently than pupils who rarely reflect on their own learning (Haukås, 2014; Haukås et al., 2018; Wenden, 1998). Haukås (2018) argues that it is essential for learners and teachers to reflect on their prior knowledge to

understand how they can master a new task and develop their metacognition. However, it is difficult for teachers to recognize pupils' levels of metacognition. There are methods of collecting information about pupils' metacognition. Examples of these methods could be looking at their behavior or self-assessments.

2.2.1.1 Learning to learn

One of the principles for education and overall development in the core curriculum is *learning to learn*. This principle shall help the school contribute to pupils' reflection on their own learning, understanding their own learning processes, and how to acquire knowledge independently to form a basis for lifelong learning (NDEAT, 2017). Further, pupils can develop consciousness of their own learning through reflections on their own and others' learning. Pupils will learn about learning strategies and how they can develop by working with challenges in each subject. Further insight will be developed as pupils master diverse strategies to acquire, share, and be critical to learning. Additionally, further insight will be developed as the pupils see the connection between knowledge areas. However, it is expected that some pupils will find it challenging to learn despite learning strategies and individual effort. Thus, it will require a broad approach from the school to develop the ability for lifelong learning for every pupil.

2.2.2 Assessment for learning in Norway

Both internationally and nationally, assessment is in development continuously. As mentioned in chapter 1.1, the Ministry of Education and Research and the Norwegian Directorate for Education and Training have focused on schools' professional development with feedback and continuous assessment since 2006.

Schools in Norway are obliged to follow the Education Act and the current curriculum. Our introduction mentioned § 3-2 *the right to assessment* and § 3-3 *assessment in subjects* in the Regulation to the Education Act (2006). We noted that the curriculum in the English subject (LK20) explains how the teacher shall assess and support pupils (NDEAT, 2019b). LK20 finds support in what the Regulation to the Education Act describes as continuous assessment in subjects (our translation):

> All assessment that takes place before the end of the training is continuous assessment. Continuous assessment in subjects shall be used to promote learning, adapt the teaching, and increase competence in subjects. The continuous assessment can be both oral and written.

In continuous assessment, pupils shall (…)

a) participate in the assessment of their own work and reflect on their own learning and academic development
b) understand what they shall learn and what to be expected of them
c) get knowledge of what they master
d) get guidance about how they can continue their work to increase their competence

(Regulation to the Education Act, 2006, § 3-10).

The core curriculum states that assessment is vital that the school understand the term competence while working with curriculums and assessing pupils' competence (NDEAT, 2017). The core curriculum defines competence as "the ability to acquire and apply knowledge and skills to master challenges and solve tasks in familiar and unfamiliar contexts and situations. Competence includes understanding and the ability to reflect and think critically". The knowledge pupils are expected to obtain during their education is stated within the competence aim in the English curriculum (henceforth referred to as LK20). The competence aims in LK20 curriculum intend for pupils to explore, interpret, reflect and explain, among other things (NDEAT, 2019b). These aims imply that it is up to the teacher to decide which products to assess, which assessment criteria the evaluation will be based on, and to what degree the desired targets are met. After the national AfL program (NDEAT, 2019c) was carried through, the new curriculum was implemented. LK06 did not mention formative assessment but contained a chapter about final assessment (NDEAT, 2013). According to LK20, teachers shall give formative assessments, leading to competence development and promoting pupil's learning (NDEAT, 2019b). The teacher shall also use various learning resources and involve pupils in their learning process. In addition, the teacher shall guide the pupils so they can develop their written, oral, and digital skills in the subject. Burner (2020, pp. 57-58) argues that the increased focus on formative assessment in LK20 should increase assessment awareness among English teachers. He applies that the challenging part of increasing the assessment awareness lies in practicing formative assessment. It will not be enough to know about formative assessment or discuss it with other teachers; one needs to practice subject-specific assessment. Burner concludes that knowing about the challenges and implications will give teachers an excellent starting point to act (Burner, 2020, p. 60).

The Pupil Survey in Norwegian schools (NDEAT, 2022b) is carried out every year by NDEAT to map pupils' learning environment in school. The survey is handed out to 7th graders, 10th graders, and pupils attending the first year in upper secondary school. This survey is obligatory to carry out during the autumn semester. One of the sections in the survey concerns AfL. This section includes eight questions relating to AfL. Results from the past three school years published on NDEAT's webpage show that pupils in 7th grade are more pleased with AfL than 10th graders, as they score higher in all eight questions. A report about the Pupil Survey from 2019 suggests that assessments about what pupils can do in order to get a higher level of achievement and mastery show a gradual and continuous decrease from primary school to the end of upper secondary school (Wendelborg et al., 2020). Results show that the questions with the lowest score (2,6 and 2,8 out of 5,0) regard pupils' involvement in the assessment process. This includes having a say in what will be assessed and pupils' involvement in assessing the schoolwork. The question with the highest score is related to if teachers explain what the focus will be on when assessing schoolwork well enough, with 3,8 out of 5,0. The two questions with the second-highest score, with 3,7 out of 5,0, are related to if teachers explain what the learning aims in different subjects are to ensure that the pupils understand and if they inform pupils what is good about their work. Whether teachers talk with the pupils about what they must do to become better in the subjects got a score of 3,5. The questions with the highest scores regard if the teachers explain what the aims in different subjects are in understandably (3,7), whether the teachers explain what will be in focus when assessing the schoolwork well enough (3,8), and whether teachers tell the pupil what is good with the pupil's work (3,7). While pupils getting help from teachers to think about how to develop in the subject has a score of 3,1.

The Union of Education Norway (Rambøll Management Consulting, 2020) investigated the assessment practices among teachers in Norway. The teachers represented different classes, 4th grade, 10th grade, and first year of upper secondary school (VG1). 86 % of the teachers answered that they let their pupils use self-assessment. Teachers from 10th and VG1 are most favorable to self-assessment but add that there are significant variations among the pupils' ability to self-assess and that academically strong pupils benefit most from the method. In addition, several teachers mention that it is challenging to see/measure if self-assessment has any effect and if pupils follow up and use the self-assessment to develop. 52 % of teachers use peer assessment (Rambøll Management Consulting, 2020). In peer assessment, pupils assess and give feedback to other pupils. An advantage of using peer assessment is that it promotes learning for the pupils to assess each other's assignments (Burner, 2018, p. 258). Several

teachers underline that a good and safe classroom environment is essential to experience success with peer assessment. Further, several teachers mention that they experience academically strong pupils benefit more from peer assessment compared to self-assessment.

Rambøll Management Consulting (2020) asked the teachers to choose the three answer options they considered the most important goals with continuous assessment work. 75% of teachers found it most important to give a continuous assessment that gives information about how the pupil can develop further. Teachers in 10th grade have the highest rate with 82 % against 4th-grade teachers with 62 %, and all teachers had an average of 75 %. The second most important goal was that the teachers wanted their pupils to experience mastery (59 %). The third most important goal was for the pupils to develop a better understanding of their learning through assessment stated by 58 % of the teachers. Moreover, 33 % stated that pupils get to know their academic level, 32 % answered that pupils get to show their competence in different ways, and 26 % responded that pupils should experience a desire to learn. Lastly, 18 % answered that pupils should have a good learning environment. Concerning the answer option about pupils' desire to learn, the average percentage was 26 %. 10th-grade teachers had the lowest percentage with 22 %, while 4th-grade teachers had the highest rate of 39 %.

Several teachers claim that assessment contributes to pupils' stress, and teachers experience that the most significant factor for stress in school is the grade pressure among pupils in secondary and upper secondary school (Rambøll Management Consulting, 2020). 62 % of the teachers answered that they had changed their assessment practice to reduce unnecessary stress among their pupils. This could be done by reducing assessment situations, more pupil involvement, and more flexibility in tests or presentations. The teachers are experiencing that pupils get stressed about many tests, extensive tests, their ambitions, presentations, and grade requirements to attend upper secondary school, among other things. Also, teachers experience that most pupils overlook the feedback when they give a grade alongside the feedback.

The content of assessments will vary from subject to subject depending on the purpose of the topic and the competence aims in the subject. Together with subjects such as Norwegian, Spanish, German, and French, English is a language learning subject. In LK20, it is stated that the English subject shall contribute to, among other, cultural understanding, identity development, and communication (NDEAT, 2019d). In addition, the subject shall give sufficient English language competence in reading, oral, and written communication. This is to

prepare pupils for further education, society, and working life. Furthermore, LK20 mention that pupils shall experience that managing several languages is a resource both in school and society.

2.2.3 Assessment with digital tools

In an increasingly digital society, it is necessary for educational institutions to adopt modern technology (Hoem & Iversen, 2020, p. 156). However, using digital tools and technology will not change the educational practice if it is not used with a pedagogical purpose. Even though digital technology has been used for teaching purposes for decades, extensive and creative use of pedagogical technology is often seen as an act of digital enthusiasts. Many teachers have negative attitudes towards machine learning digital tools such as the digital dictionary Google Translate as they see it as a quick fix in language learning. Teachers often advise pupils not to use free machine translation tools for reasons like low learning outcomes and that it will give poor quality to the pupil texts (Vold, 2018, p. 67). However, many pupils will probably keep using these digital tools despite teachers' advice. In an increasingly digital world, one should instead be figuring out how teachers can work with digital tools, not against them.

Digital skills are listed in LK20 as one of the basic skills, along with oral, reading, and written, competence (NDEAT, 2019a). Digital skills in English involve meeting conversation partners and authentic language models, enhancing language learning through digital media and resources, and acquiring relevant knowledge digitally. The curriculum does not state what or which digital media or resources pupils must learn or what "relevant" knowledge is. However, one of the competence aims after Year 10 mentions digital resources specific "use different digital resources and other aids in language learning, text creation and interaction" (Norwegian Directorate for Education and Training, 2019b).

Even though many student teachers have grown up with digital technology, (Krumsvik, 2016) states that student teachers might still feel that teacher education does not prepare them for the pedagogical use of digital tools they will meet in working life. In school, pupils also need guidance in the use digital tools (Harmer, 2015, pp. 96-97). Digital tools can be used to give assessments in various forms. It is common to assess pupils' work either by printing out and giving feedback and comments on a piece of paper or giving feedback on their work directly in a word processor. This is commonly done by commenting on an assignment's structure, content, or language. The use of digital tools enables other implementations of feedback. One implementation could be for teachers to record audio while going through pupils' work. Providing audio feedback leads to more detailed feedback given to pupils (FitzPatrick &

McKeown, 2020). Further, pupils can receive specific and more detailed feedback because audio feedback is less time-consuming for teachers than giving the same amount of written feedback (Bilbro et al., 2013). Bilbro et al. (2013) further state that implementing audio in feedback could make it easier for pupils to understand the content of feedback since oral feedback is often more direct than written feedback. Another implementation could be to include video as a form of feedback. Teachers could then record a video of themselves while going through pupils' work. Pupils tend to find video feedback more informative and personal, as well as being better at suggesting how to improve in the future (Lamey, 2015; West & Turner, 2016). Further, Lamey (2015) states that receiving video feedback is easier for pupils to understand compared to written feedback.

Lothe (2017) wrote her master thesis about AfL and digital tools. In the study, Lothe, a teacher, uses Showbie (a digital tool) to assess her pupils in the Norwegian subject. The study is based on the perspective of two teachers, who claim that the digital tool is resourceful to use in the assessment process. Among other findings, Lothe presents that the teachers experienced that Showbie helped teachers positively in the assessment process. She further presents that the digital tool can be used to give different types of feedback, such as individual and collective feedback. The application can also be used to divide pupils into learning groups as well as helping teachers gain an overview of the pupils. This overview allows the teachers to adapt feedback to each pupil better than before the introduction of the application. Lothe states that the teachers recognize the digital tool as an application that helps facilitate AfL. Lothe further states that teachers mention that the digital tool helps teachers get an overview of pupils' work, and the quality of pupils' texts increases due to using the application for AfL.

3   Methodology

This chapter will present the mixed methods approach used in this study. Section 3.1.1 describes the research strategy *action research* and our role in an action started by the school. In section 3.2, we will explain the choice of methods for data collection. We will further explain each method, questionnaire, observation, and pupils' texts to increase the validity of this study. Section 3.3 addresses key characterizations relevant to the pupils and teachers as respondents. The methods of analysis of the questionnaires, observation, and pupils' texts will be described in section 3.4. The methods of analysis of the questionnaires, observation and pupils' texts will be described in section 3.4. Lastly, section 3.5 will address the quality of the study. This section will discuss the study's reliability, validity, transferability, and ethical and methodical concerns relating the respondents and data collection methods.

Through our participation in the university project LAB-TEd, we got in contact with one of the schools taking part in the project. In dialogue with the teacher representing the school, we put forward our thoughts about focusing our master's thesis on AfL. The teacher presented how the school had started using OneNote for AfL at the start of the school year. We discussed together with the teacher how to approach this project and decided to focus on pupils' experience with AfL. The school had introduced a self-assessment table (see Appendix 6), where pupils were meant to assess themselves based on two questions about what they thought they had accomplished and what they were going to focus on going forward in the English subject. The self-assessment table was a part of the assessment practice at the school that the teacher wanted us to analyze. The action related to the table will be addressed in section 3.1.1.

We also wanted to gather information about pupils' experience of AfL. We got access to two classes at the school with pupils ranging from 8th to 10th grade. In order to collect information about the classes' experience with AfL, we got the two classes to answer two questionnaires. The second questionnaire was carried out approximately three months after the first. The questions were based on questions used in the Pupil Survey in Norwegian schools, research about assessment and AfL, as well as OneNote specifically. Some of the questions from the first questionnaire were carried over to the second to see if there were any differences in answers during the period. We were able to observe the usage of OneNote in the classroom on 12 different occasions. This gave us an idea of how OneNote was used, not only for assessment purposes but also in general usage. Results from the two questionnaires are presented in section 4.1.

We got access to the two classes' OneNote spaces. The access gave us insight into the English subject, as well as "My lifelong learning". "My lifelong learning" is where pupils' assessments are stored inside OneNote. Each pupil's OneNote is separated into different "notebooks", with a notebook for every subject in school. We got access to a total of four notebooks, two English notebooks and two "My lifelong learning" notebooks (see Appendix 7 and 8 for screenshots of the layout of both notebooks). This access was used to view and analyze teachers' assessments and self-assessments done by pupils. Results of the analysis will be presented in section 3.4.2.

In discussion with the teacher and our supervisor, we decided that it could be beneficial to include the English teachers' experience of the implementation of AfL using OneNote. Therefore, we sent out a questionnaire to the English teachers at the school. The questionnaire primarily contained questions with open-ended answer options regarding their experience of using OneNote as a tool for AfL and their perception of how pupils have received the implementation of AfL using OneNote. This was done to allow the teachers to describe the transition of a more pupil-centered assessment practice. Findings from the questionnaire will be presented in section 4.1.6.

3.1 Research design

Creswell and Creswell (2018, p. 49) present qualitative, quantitative, and mixed methods as different design approaches. Qualitative research is used to explore and understand the meaning of a social or human challenge. Researchers who implement this approach analyze their data material and present their results as interpretations. Quantitative research tests theories by looking at relations between different variables. The last approach, mixed methods, includes data from qualitative and quantitative approaches as it could provide a more complete understanding of the research question than a qualitative or quantitative approach would do separately. In relation to this, the mixed methods approach looks at a phenomenon from different perspectives (Brevik & Mathé, 2021, p. 47).

3.1.1 Action research

Action research is a research strategy with the aim of changing a current practice on a local level (Cohen et al., 2017, p. 440). A research strategy is about achieving a goal through a plan of action (Denscombe, 2014, p. 3). Action research is attached to the idea that change is good (Denscombe, 2014, p. 124). Therefore, studying changes is valuable as we can learn and

understand how things work. Action research is a cyclical process where one starts to identify a problem in a professional practice. Once the problem is identified, one begins doing systematic research about the field. The next step is to set up a plan to do an action before implementing the action. Once the action is implemented, the cycle moves over to analyzing and identifying if there are any other problems or possibilities for improvement. This cyclical process can continue indefinitely if new issues arise.

This study entails to do research about AfL with the support of digital tools. Through the university project LAB-TEd, we got in contact with a school that had started using OneNote as a digital tool for AfL at the start of the school year 2021/2022. The school's intention and motivation were to change their assessment practice. The school had many reasons to start the implementation. One reason to focus on AfL was that the school wanted the pupils to get more ownership of their own learning. This was done by pupils writing self-assessments more frequently as well as taking a bigger part in the development talk at midterm. Before the development talk, each pupil would write self-assessments in every subject based on the previous term. Another reason to implement OneNote was to store all assessments in each subject in one place to be able to access them throughout a pupil's time at the lower-secondary school. This would make it easier for both the pupil and teachers to keep track of their development and have important assessments stored together.

Our role in this study was to do research on the implementation from an outside perspective, with the help of the teacher taking part in LAB-TEd. The practitioners, teachers, and management at the school took the initiative to start this action research. Carr & Kemmis (1986) suggest technical, practical, and emancipatory approaches to action research. Further, they mention that they only recognize emancipatory action research as an authentic form of action research. In emancipatory action research, the practitioner is the one taking the initiative and who is defining the problem area. Here, communication and shared understanding between the practitioner and researcher is essential. According to Carr & Kemmis (1986, pp. 188-189), the aim of emancipatory action research is for the practitioners to develop an independent action research group driven by self-critical reflection and systematic research. This enables the researcher to withdraw from the action research and hand over the following learning and development process to the practitioners.

The implementation of AfL at the school could be seen as the first action in an action research project. The actions done by teachers and school management can be viewed as the first step in

action research (de Beer, 2019, p. 396). De Beer (2019) identifies five actions in action research, including identifying a problem, planning the intervention, acting and collecting data, analyzing the data, and evaluating the findings. This is a continuous cycle that can be used to further identify other problems after a problem has been evaluated. The next step in our project was to plan the intervention. This was done in dialogue with the teacher partaking in LAB-TEd. Based on our conversation, we decided to focus on the self-assessment table (see Appendix 6). The table was examined to see if any changes based on research could improve the table. Hattie and Timperley's article *The Power of Feedback* (2007) addresses three effective feedback questions that focus on *feed up*, *feed back*, and *feed forward*. We based our action on the three questions: *"Where am I going?"*, *"How am I going?"*, and *"Where to next?"*. The table already used at the school before the action had two questions about what the pupil thought they had accomplished and what they were going to focus on going forward in the English subject (see Appendix 6).

Our thesis entails to do research about AfL with the support of digital tools. We did our research at a school that already had started using OneNote as a tool for AfL at the start of the school year 2021/2022. The school's intention and motivation were to change their assessment practice. The school had multiple reasons to start the implementation. One reason was to store all assessments in each subject in one place and keep them there throughout the pupil's time at lower-secondary school. That would make it easier for both pupil and teacher to keep track of the pupil's development. Especially with the thought of pupils starting to write self-assessments in each subject to midterm with the aim to sum up their achievements and challenges they experience in the subjects. Another reason was that the school wanted the pupils to get more ownership of their own learning. Among other, by involving pupils to write self-assessments. The school wanted to use these self-assessments in the development talk. Our role was to do research on the implementation as a third party. This was done by asking pupils and teachers about assessments and AfL in OneNote, observing how OneNote was used in the classroom, and analyzing pupils' assessments in OneNote.

Our contribution to the action research resulted from a request by a teacher to research and improve the assessment practice in OneNote at the school where we did our research. OneNote as a digital tool in the assessment process was newly implemented at the school. The school did not hesitate to invite us as student teachers to research the field as we could discover strengths and weaknesses and bring in ideas for development. The teacher at the school involved in our project through LAB-TEd, wanted us to look at the standard self-assessment table the staff at

the school had put together for pupils to evaluate themselves (Appendix 6). The teacher wondered what research says about efficient self-assessment practices. After researching different studies, we discovered Hattie and Timperley's article *The Power of Feedback* (2007). The article addresses three effective feedback questions that focus on *feed up*, *feed back*, and *feed forward*. We based our first action on the three questions: *"Where am I going?", "How am I going?"* and *"Where to next?"*. The table the school already used had two questions. The first question wanted the pupils to say what they had accomplished, and the second question asked the pupils what they wanted to work with going forward. We decided to simplify and reword these two questions while adding a third question to the table. Based on the three effective feedback questions, we wanted the third question to make the pupils think of how they could succeed with what they wanted to accomplish in the English subject moving forward. This table, however, was only implemented in the English subject in the two classes we have had access to throughout our project so far. We have gathered data through observations, questionnaires, and pupil texts.

3.2 Methods of data collection

Our research questions intend to investigate pupils' and teachers' experiences and expectations of AfL in school using OneNote at a lower-secondary school. We chose mixed methods as our research design as we found it valuable to include quantitative and qualitative data collection methods. Mixed methods is becoming a more common research design within education research and interdisciplinary research (Brevik & Mathé, 2021, p. 47). By having a mixed methods research design, the researcher can collect multiple forms of data, such as a quantitative questionnaire and qualitative methods like interviews or observations (Creswell & Creswell, 2018, p. 14). According to Creswell and Creswell (2018, p. 213), mixed methods provide two different types of information. The qualitative data are open for interpretation, and quantitative data is closed-ended with determined numbers. Further, they argue that carrying out both a quantitative and a qualitative data collection allows us to compare data and use the methods' strengths and minimize the limitations of both approaches. One can, for example, use qualitative data as supplementary information to the collected quantitative data. Our qualitative data are collected from questionnaires, observations, and pupils' texts in OneNote. The quantitative data is collected from the same questionnaires from which we got the qualitative data. In this study, we have chosen to have a few data collection methods as we believe they

have strengthened our findings by supporting findings across methods. Further on in this section, we will describe how we have used the following methods to collect data: questionnaires, pupils' texts, and observation.

3.2.1 Questionnaire

Using questionnaires as a method is an opportunity to gain insight into several respondents representing a more extensive selection. Questionnaires often have closed answer options, making it easier to compare answers and do statistical analysis (Gleiss & Sæther, 2021, p. 150). Questionnaires can also contain open answer options which allow the respondents to formulate answers with their own words. Combining open and closed answer options make questionnaires' data collection both quantitative and qualitative.

Before a questionnaire is ready to be sent out to the respondents, there is a lot of preparation that goes into designing it. Frønes and Pettersen (2021, p. 170) present six steps to consider while working with a questionnaire. The first step is to plan what the researcher wants to find out about the respondents. Here, the formulated research question(s) should be used to both narrow and specify what the researcher want to figure out and how to target a specific group. Secondly, the researcher needs to develop the questionnaire. This is arguably the most crucial part of the questionnaire, as questions need to be produced, tested, and improved in numerous stages. To avoid misunderstandings, the question and answer options should have an understandable language and be formulated so that it will be easy for the respondent to understand the right context of the questionnaire (Gleiss & Sæther, 2021, p. 158). The third step focuses on the selection of the people who are going to answer the questionnaire. The fourth step is where the questionnaire is carried out. This includes sending out information about the project, gathering consent forms, and conducting the questionnaire. The penultimate step is about managing, describing, and analyzing the data. This could be done either quantitatively by looking at statistics or qualitatively by systematizing and coding the data. The sixth and final step describes how the researcher evaluates and discusses the findings in a truthful, traceable, and verifiable manner.

We carried out a total of three questionnaires – two of the questionnaires targeting the pupils and one aimed at English teachers at the school. The questions had both open and closed answer options. Some of our questions are inspired by the section assessment for learning in the Pupil Survey by the Norwegian Directorate for Education and Training. As Gleiss & Sæther (2021, p. 205) state, reusing questions from well-proven questionnaires can improve the validity of the

questionnaire. NDEAT has published the results from the Pupil Survey (NDEAT, 2022a), which gives us a chance to compare our results. In order to statistically analyze the questions with closed answer options, we used a 5-point Likert scale on a continuum ranging from strongly agree to strongly disagree. The Likert scale was used to receive nuanced information from the respondents (Frønes & Pettersen, 2021, p. 183). Adapting and forming questions and answers to the targeted group need to be well thought out, as respondents must understand the differences in answer options. The Likert scale includes a neutral option that allows the participants not to take a stance to a particular statement or question.

3.2.1.1 Pupils' questionnaires

We decided that having two questionnaires would benefit our project positively. In our first questionnaire targeting the pupils, the primary purpose was to map their attitudes, expectations, and experiences relating to assessment in the English subject before we started our action or any data collection. The questionnaire (Appendix 3) had a total of 18 claims and questions that were categorized based on teachers' practice, feedback frequency, pupils' involvement, and pupils preferred and understanding of feedback received from teachers. Sixteen of the questions and claims had closed answer options, where three of these questions allowed the pupils to write a complementary answer if they chose the option *Other*. We decided to have the answer option *Other* with a textbox in case any of the pupils had something on their minds that we did not think of. We also chose to have two questions where the pupils had to write an answer. The first open answer question allows the pupils to write and reflect on why they use or do not use the feedback they get from their teachers. The second open answer question is about the pupils' beliefs about receiving assessment in OneNote. In line with that, we can argue that our first questionnaire had a parallel design that gave us both quantitative and qualitative data. This is because the reasoning of integrating the data will give a more holistic depiction than each data set would separately (Brevik & Mathé, 2021, p. 56). This form of integration could help us see the bigger picture of our data collection than it would separately (Frønes & Pettersen, 2021, p. 56).

The second questionnaire was carried out almost three months after the first one. This questionnaire also focused on assessment, different forms of feedback, and had a greater focus on how they experienced the use of OneNote as a tool for assessment in the English subject. The questionnaire included 11 questions, where all answer options were closed (Appendix 4). Five of the 11 questions were reused from the first questionnaire. Because of the time elapsed since the first questionnaire was carried out, these questions were picked deliberately regarding

as we knew the pupils had gotten more experience with AfL in OneNote. Using the exact same questions from the two questionnaires makes them comparable to each other. First, we wanted to compare if there were any differences in their experience with the teacher giving the assessment criteria before an assignment. We also wanted to see if there were any differences considering pupils' experience about being allowed to determine the assessment criteria. Two of the questions used in both questionnaires focused on the feedback from their English teachers. The first question asked the pupils if they understood the feedback received from their teachers, and the second question focused on if the feedback given was helpful to the pupils. The last transferred question surrounded whether the pupils preferred feedback from teachers, self-assessment, or peer assessment as a form of feedback. The last two questions in the questionnaire concerned our action research about the self-assessment table.

3.2.1.2 Teachers' questionnaire

We also distributed a questionnaire to the English teachers at the school. This was particularly to gain an insight into the English teachers' experiences with using OneNote and if they shared some of the pupils' experiences. The teachers' questionnaire was carried out at the same time as the pupils got their second questionnaire. The questionnaire entailed three focus areas. First, it focused on the teachers' experiences using OneNote as a digital tool to assess pupils' work. Secondly, we asked them to reflect on the implementation of OneNote, and lastly, if they experienced any change considering the time spent on assessment compared to previous years. The questionnaire had five open answer questions and one question with closed answer options. We decided to have questions that claimed textual answers with the main aim of receiving reflections instead of answers that could be scaled statistically.

3.2.2 Observation

Observation is a suitable method to study what happens in the classroom (Gleiss & Sæther, 2021, p. 101). It is common to divide observation into structured, semi-structured, and unstructured observation. The researcher prepares a predetermined observation scheme that has determined categories in structured observation. Semi-structured observation is more open and can contain an observation scheme with both determined categories and open categories. Unstructured observation has open categories. Observation combined with other methods gives the opportunity to use the sensory impressions from observations to fill and contextualize the data from other methods (Dalland et al., 2021, p. 126). For example, doing several observations in the classroom would give information about how the social interactions are and how the

pupils tend to work in class. Observing before the other data collecting methods could provide better results as one can use the observation to build the questionnaires.

Our observation has been carried out in the classroom. In total, we observed 12 times in the classroom. We wanted to observe how the pupils work with OneNote before we decided which other methods to use in our research. We have also observed if the pupils ask the teacher or other pupils for help in the classroom, and how the teacher gave instruction regarding OneNote. Our observations were unstructured as we observed what we found interesting in the moment and did not have any observation scheme. We wrote down our observations as they were happening in class or after the lesson had ended. Unstructured observation can be used to get an insight into a field before the research question is set (Dalland et al., 2021, p. 126). We used the data collected from the first observations to design the questions and statements in the first questionnaire. Also, data collected from other methods will be seen in light of our observations.

3.2.3 Pupils' texts

According to Øgreid (2021, p. 331), a pupil's text is a text written by one or several pupils within a school context. In the last ten years, pupils' writing has received a great amount of attention. The attention is a result of the general development of the society, considering that particular and specialized needs are sought after by different industries, and the school needs to prepare pupils for working life (Øgreid, 2021, p. 327). However, the teacher often initiates the text as an assignment given orally or written in school, making it a given text. In addition, there are several factors researchers do not see when they analyze pupils' texts that affect the pupils in their writing processes, such as motivation, desire to write, and cognitive abilities. Øgreid (2021, p. 334) mentions that a pupil's text is often written with another aim than the researcher has with it. For example, the pupils are asked to write a text about indigenous people to obtain knowledge. At the same time, the researcher analyzes the texts to look at the structure of the sentences.

Considering that we had the pupils' assessments available in OneNote, we wanted to add text analysis as a method as we get an insight into what happens inside OneNote. In contrast to the questionnaires and observations, we dove deep into several of the pupils' OneNote pages. We analyzed how the pupils evaluate themselves in their self-assessments and how the teachers evaluate their pupils in OneNote. We also got an insight into how the teachers facilitate self-assessment in OneNote. Writing self-assessments were a part of the implementation to involve pupils in their own learning, and they wrote their self-assessments in a self-assessment table

developed by the school. We wanted to analyze these self-assessments to explore what pupils tend to focus on and if there were any differences among pupils' reflections.

3.3 The respondents

This section will present the selection of respondents to this research. We start by presenting some key characteristics of our respondents and the school that could be relevant information for the findings in this study. The school we did our research in is a lower secondary school in Northern Norway. The classes at the school are organized with 8th, 9th, and 10th graders in mixed classes of approximately 55 pupils in each class. We got access to two classes with a total of 111 pupils as our respondents. We will primarily refer to both classes in our results, but we will also refer to class 1 and class 2. The number of pupils present at school varied because of the ongoing Covid-19 pandemic during our data collection period. This affected the number of respondents in the classroom during observation and answering the questionnaires. Also, because the questionnaires were anonymous, we do not know whether mostly the same pupils answered both questionnaires. We also sent out a questionnaire to the 13 English teachers at the same school.

3.3.1 Respondents within each method of data collection

The first question in the first questionnaire wanted the participants to answer which grade they were in. This question was included in order to analyze differences in responses to the rest of the questions, depending on the grade they were in. A total of 95 pupils answered the first questionnaire, and 93 pupils answered the second. There were slight differences in the grade distribution. 29 8th graders answered the first questionnaire and 30 8th graders in the latter. 30 9th graders answered the first, while 29 9th graders answered the second. Most pupils were in 10th grade, with 36 answering the first and 34 in the subsequent questionnaire. This gave us a response rate of 86 % and 84 % comparatively. Seven teachers answered the questionnaire, with a response rate of 53,8 %. In order to use pupils' work in OneNote, we needed permission from their parents. We got approval from the pupils' parents to access and use 45 of the pupils' work in OneNote. This allowed us to access and use 40,5 % of what pupils had produced in OneNote. Lastly, seven out of 13 English teachers answered their questionnaire.

Table 1: Overview of available participants and response rate

	Total available participants	Number of responses	Response rate
Questionnaire 1	111	95	85,6 %
Questionnaire 2	111	93	83,8 %
Teachers' questionnaire	13	7	53,8 %
Access to OneNote	111	45	40,5 %

3.4 Methods of data analysis

"The purpose of analyzing something is to gain a better understanding of it" (Denscombe, 2014, p. 243). Gleiss and Sæther (2021, p. 170) supply that analysis is about dividing the data material and examining how the different pieces act with each other. Denscombe (2014) divides the aim of analyses into description, explanation, and interpretation. Descriptive analyses give the reader new insight into experiences, for example, describing the subtlety of a situation through measurements, frequency, and parts involved. There are many methods of analyzing data. One of the methods we have used is coding. In short, coding is an analysis method where the researcher divides the data material into smaller parts and gives the different parts a code, such as a label or a sentence (Gleiss & Sæther, 2021, pp. 174-175). The data material becomes organized into groups, making it easier to get an overview. The approach of the study plays a part in the analysis process. Since we have mixed methods as our approach, we will first describe quantitative analysis previous to the qualitative analysis.

When analyzing the data material, the researcher finds and interprets information to assess the quality of the data material and the validity of the results (Frønes & Pettersen, 2021, p. 191). Quantitative research analyses numbers and often has a more standardized procedure and is based on statistical methods ((Denscombe, 2014, p. 245; Gleiss & Sæther, 2021, p. 158). Denscombe (2014) argues that using numbers as data units will make the researcher seem objective and detached in contrast to qualitative research. On the other hand, qualitative research analyses words or visual images and tends to be smaller-scale studies (fewer

respondents) where the researchers are visible and involved in the data collection (Denscombe, 2014, p. 245).

3.4.1 Questionnaire analysis

Our questionaries gave us both quantitative and qualitative data to analyze. Numbers as data can represent different types of information, and it is essential to know which kind of numbers one uses to do the statistical analysis (Denscombe, 2014, p. 250). Most of the answer options in our questionnaires gave ordinal data, and a few of the questions had answer options that gave nominal data. Nominal data base the number label on named categories, such as gender or county. On the other hand, ordinal data have answer options with the same frequency and logical order. For example, Likert-scales have categories in a ranked order and are ordinal data. We also had two questions in the first questionnaire that gave us qualitative data. These answers were analyzed and coded. The answers were categorized depending on what the pupils answered and made labels fitting to the answers.

After producing a profile of the data, the next step was to analyze to see if there were any patterns or connections in the answers. After the pupils and teachers had answered the questionnaires, they were exported from *Nettskjema* and imported to IBM SPSS Statistics, the program we used to do the statistical analysis. SPSS Statistics was used to make frequency tables from the total amount of answers given and to see if there were any correlations between answers given.

3.4.2 Text analysis

The analytical assessment of the pupils' texts will be central to the presented conclusions and results, as they must be valid and reliable. We wanted to analyze pupils' assessments in OneNote to understand how the school uses OneNote for assessment. We have analyzed all the self-assessments done by the pupils and looked at the assessments given by the teachers in OneNote. The pupils had written up to four self-assessments in "My lifelong learning" plus their midterm evaluation when we did our analysis. The number of self-assessments written varies among the pupils. Some pupils have not written any, some have written one or two, while a few have written all four self-assessments. The pupils wrote the midterm self-assessments at the end of the first semester to sum up their achievements and challenges throughout the start of the school year. The self-assessment was written before the pupils got their midterm grades, and the pupils were allowed to use previously received feedback to fill it in. The other self-assessments we analyzed were often written after handing in a text or after an oral presentation.

Only a few are written in the process of a product. As we coded and analyzed the texts, we considered how OneNote could contribute to AfL. We have analyzed with both quantitative and qualitative approaches because of a high number of texts and less variety of content among pupils' texts. In other words, we coded the texts into groups and counted the frequency in the groups. We also look at the assessments the pupils had received in OneNote from the English teachers. Also, there were considerable variations among the pupils if they had their assessment table available in "My lifelong learning."

3.4.3 Observation analysis

We have done a few observations of how teachers and pupils use OneNote in teaching contexts at the application and in the classroom. Our observations were open, and we wrote down what we found interesting and relevant to our research. We discussed and assured that we had the same understanding of the observations before categorizing them with labels. We used some of our observations to design questions or statements for our questionaries. To understand how OneNote was used and how it could be used, we have observed the usage of the application and written down the possibilities and limitations the applications have relating to assessments in the English subject.

3.5 The quality of the study

The quality of a research study is decisive for how reliable the researcher's findings are (Frønes & Pettersen, 2021, p. 200). The terms reliability and validity help the researcher assess the quality of the study (Gleiss & Sæther, 2021, p. 206). Cohen et al. (2017) argue that the terms have different meanings within the qualitative, quantitative, and mixed methods approaches. Further, this section will discuss the quality of this study, considering reliability, validity, transferability, as well as ethical concerns related to the data collection.

3.5.1 Reliability

In research, reliability is connected to the quality of the research process and how reliable the study is (Gleiss & Sæther, 2021, p. 201). Johannessen et al. (2016, p. 36) argue that reliability relates to the accuracy of the research data, the method of data collection, which data is used in the research, and how the data are reviewed and analyzed. As researchers, we need to assess the reliability of this thesis by being as objective as possible. For example, by evaluating whether the methods have influenced the outcome of the result and if the result could be

reproduced by others who want to do the same study. According to Johannessen et al. (2016, pp. 231-232), quantitative research is more critical and has several ways to measure its reliability than qualitative research has. The reliability of qualitative data depends more on the researcher's values or the context the researcher is in when the data collection happens. Researchers who describe the context and reflect on different factors will strengthen the reliability of their study.

There are multiple ways to test the reliability of the data (Johannessen et al., 2016, pp. 36-37). One of the ways is to do the same method to the same response group with an amount of time between them. If the results are the same, it is a sign of high reliability. In our research, we had some of the same questions in the second questionnaire as in the first questionnaire. Our thought was to see if there were any noticeable changes or to see if the pupils had the same opinion regarding assessment as they had three months earlier. Naturally, a few factors can influence the response to the second questionnaire. For example, if there has been an increased or decreased focus on assessment in the meantime of the questionaries, or that the design of the second questionnaire could be interpreted otherwise for the pupils. Also, since the questionnaires were anonymous and had different outcomes in the number of participants, we can be assured that it is exactly the same respondents in both questionnaires. Another method to check the reliability of the data is to use earlier research that looked at the same phenomenon (Johannessen et al., 2016, p. 37). In this study, we have compared some of our data to statistical research from the Pupils Survey (NDEAT, 2022b), a report about assessment practice in Norway (Rambøll Management Consulting, 2020), and other qualitative studies presented in the theoretical framework of this study.

3.5.2 Validity

The validity of a study is considered by the researchers' quality of the data collection, interpretations, and conclusions (Gleiss & Sæther, 2021, p. 202). That indicates that parts from the data collections must be related to one another. According to Cohen et al. (2017, p. 245), addressing the validity of a research study is very important. They claim that a research study with a lack of validity is worthless. The validity, therefore, concerns how well the different parts of the research design are related to one another (Gleiss & Sæther, 2021, p. 204).

In mixed methods, the representation of the data collection, reliable results, and the emphasis on quantitative and qualitative data could challenge the validity of a thesis (Cohen et al., 2017, p. 250). Therefore, we found it appropriate to use several methods for data collection to

strengthen our findings in this research. Triangulation is an approach that uses several data collection methods to increase the validity of a study (Johannessen et al., 2016, p. 232). We have used triangulation by observing the use of OneNote before making the questionnaires, as well as investigator triangulation because both researchers participated in the data collection. All three methods, questionnaire, pupils' texts analysis, and observation, were chosen with the aim of separate data to either supply each other or to discover conflicts. An example would be to compare answers in the questionnaires against the analysis of pupil texts or/and our observations. The validity of quantitative research emphasizes the context between the phenomenon and the collected data, while in qualitative research, the validity is about how the researcher's procedure and findings reflect the purpose of the study (Johannessen et al., 2016, p. 232).

The fact that we are two student teachers who have written this thesis together could increase the study's validity. Having a partner makes it possible to do separate work and later compare interpretations and discuss the outcomes. We were present in the classroom during the collection of pupils' questionnaires and observation. Before we started our data collection, we informed the pupils about our research and that their answers in the questionnaire would be anonyms. We asked them to answer honestly and assured them that we student teachers would process the data. The teacher's questionnaire was distributed to the English teachers through the teacher (contact person) at school.

To strengthen the validity of our questionnaires to the students, we had four lower-secondary pupils from another school that did the questionnaires with the aim of checking their understanding of the questions and answer options. According to Frønes and Pettersen (2021, p. 186), designing a questionnaire and testing it out is important to avoid weaknesses using the method. For example, if a questionnaire is not understandable for the respondents or respondents perceive questions as offensive, the questionnaire will be assessed as not valid.

3.5.3 Transferability

Transferability, or generalizability, is referred to as external validity (Cohen et al., 2017, pp. 247-251; Johannessen et al., 2016, p. 233). External validity concerns the opportunity to generalize findings from one context to another (Gleiss & Sæther, 2021, p. 207). Some forms of quantitative studies will have the aim to generalize their findings. Generalized findings would entail results from a selection of respondents in a study that can be extended to apply to a larger population. These studies are based on a probability range within a population they

would like to analyze based on a selection from that population. This, however, does not apply to all quantitative studies. When referring to qualitative studies, it is common to use the *transfer* of knowledge instead of generalization (Malterud, 2011; Thagaard, 2018). Considering the data collection in this study, we can assume that some parts of the study are more generalizable than others. The are several factors in generalizing that challenge the study's external validity, such as the limited number of participants, the specific situation being researched, as well as the experience of the researchers. Regardless of the limited transferability to a larger population, we still believe that this study can provide beneficial information for readers who find it applicable or relevant.

3.5.4 Ethical and methodological concerns

When planning the data collection, it is important to consider how much quantitative and qualitative data the researcher needs to answer the research question (Brevik & Mathé, 2021, p. 66). In addition, it is not ethically justifiable to collect large amounts of data if it is not going to be used. Creswell and Creswell (2018, p. 88) argue that researchers should anticipate ethical issues that may arise during a study to protect and develop trust among the participants. Participants in action research should be informed about the study and consent to partake without consequences if they choose not to participate (Cohen et al., 2017, pp. 454-456).

Collecting data through several methods and getting different perspectives from the respondents, as we have done with mixed methods, claims to protect the participants' privacy, for example, by deidentifying the respondents (Brevik & Mathé, 2021, p. 67). We did not find it relevant to our study to collect any personal data about the respondents from questionnaires and observations. The respondents answered the questionnaire using *Nettskjema*, developed by the University of Oslo and is an approved website for research questionnaires. To avoid privacy concerns, we followed the guide to Norwegian Centre for Research Data (henceforth referred to as NSD) about how to carry out an anonymous data collection. That implied not using any sensitive data from the respondents. For example, we made sure that *Nettskjema* did not store any IP addresses or ask for login information from the respondents. Also, the observations done in the classroom are written down without mentioning name, age, gender, or any other information that can be traced back to any of the pupils. However, we checked how many pupils that selected they were in 8th, 9th, or 10th grade with the actual number of pupils in each class to eliminate doubts about abnormal results.

Collecting data from OneNote without seeing the names of the pupils was not possible. Therefore, we had to apply to NSD in order to use OneNote for our data collection. After we got permission from NSD, we needed consent from the pupils' parents since the pupils were underaged. The consent form (Appendix 2) was presented and handed out to the pupils as well as sent out to the parents by e-mail. The e-mail provided information about the project and a link to *Nettskjema*, where the parents could give consent digitally. The parents could also sign the handout pupils brought home and return them to the school, where teachers would collect them for us.

4 Research findings and analysis

In this chapter, we will present the findings of this study. All our questionnaires were initially written in Norwegian in order to limit language misconceptions. Also, all the assessments written by pupils and teachers in OneNote were written in Norwegian. The statements, questions, and answer options in the three questionnaires and assessments from OneNote were translated to English by us. We have divided our findings from questionnaires, observations, and text analysis into section 4.1 concerning assessments in OneNote and section 4.2 concerning assessments independent of OneNote.

4.1 OneNote Class Notebook

This section will present our findings from four of the statements and open-answer questions from the pupils' questionnaires concerning the use of OneNote and the teachers' questionnaire through observations and text analysis.

4.1.1 Pupil texts and assessments in OneNote

We will first present our findings regarding our analysis of the self-assessment table in 4.1.1.1, and in 4.1.1.2 we will present findings regarding our analysis of the midterm self-assessment. Common in both self-assessment table and midterm self-assessment were that all assessments are written in Norwegian, regardless of the assessment writer's class, grade level, or teacher.

4.1.1.1 Self-assessment table

Table 2: Overview of findings from analyzing the self-assessment table

What have you achieved?	All pupils who have written self-assessments write something about what they have achieved and reflect upon what they have succeeded in. Six pupils mention that they have noticed an improvement in their writing or that they are more orally active.
What do you want to achieve further in the English subject?	Pupils want to improve their English. Some pupils focus on improving their writing and oral skills. Others focus on their content or sources used.

How can you achieve that?	In total, there are many learning strategies mentioned. For example, to become more orally active, be more prepared before an oral presentation, reading through the text before they hand it in, use synonyms, and get more input and output in their spare time.
Description of the analysis based on the pupils' texts in OneNote	We got permission to access and use texts from 45 pupils in total.

Most pupils vary their focus on content in their self-assessments.

The length of self-assessments related to each question varies from one to four sentences.

The pupils often write reflections that show a relation between the three questions in the self-assessment table. However, there is an occurrence of different directions between the first question and the second. For example, the pupils reflect on achievements in written assignments in the first question, but in the second question, they write that they want to become better at speaking English and follow up on what they wrote in question two in the third question.

Seven pupils have not written any self-assessments.

Class 1 has had one more self-assessment than class 2.

Class 1 has had two self-assessments considering written assignments, one about "fagdag" and one about a specific oral presentation.

Class 2 has had two self-assessments considering written assignments and one about "fagdag".

In class 1, six of the pupils had written all four self-assessments.

In class 2, none had written more than two self-assessments.

There were nine pupils that have copied the assessment from their teachers into their page in "My lifelong learning". Eight of these pupils have written almost the same as their teachers in their own self-assessment. |

Nine pupils in class 1 had an assessment from teachers and a table for assignment criteria in "My lifelong learnin". As we analyzed and looked for pupils' assessments in OneNote, we did not easily find the assessments from teachers. Assessments from teachers were sometimes found in a Word document on the page where the pupils had handed in their assignments. The

Word documents contained direct comments from the teacher in the text and an assignment criteria table with comments on what is good and what can be improved. These assessments were found in the notebook on the subject and not in "My lifelong learning".

In the following table, we will present two different examples of self-assessments by pupils with varying amounts of reflection.

Table 3: Example of a simple reflection on self-assessment

Based on your own experiences, own work, and received feedback	My comment
-What have you achieved?	Example one: I have achieved to use English in a comic. Example two: I structured the text with an introduction, a main part, and a conclusion.
-What do you want to achieve further in the English subject?	Example one: Write and pronounce English better. Example two: I used a varied vocabulary, which I think makes the text more interesting to read.
-How can you achieve that?	Example one: Read something multiple times, write it multiple times, write own glossary. Example two: I also managed to write about texts we have read in English lessons in the text I wrote on the "fagdag".

In the English area in OneNote, we found resource pages made by the English teachers for the pupils. The resource pages are found within the English subject and are addressed with their own section that pupils can use for language support. The resource pages contain explanations and grammar rules. Examples of these pages are prepositions, concord, adjectives vs. adverbs, and the definite article. These pages are sometimes used by teachers when assessing pupils'

work. Teachers can link to specific resource pages in comments in Word documents. In addition, in some assignments, there are links to YouTube videos of TikTok clips that show short videos explaining typical grammar errors and the correct use of them.

4.1.1.2 Pupils knowing what and how to achieve next

Table 4: The statements refer to the two statements in the second questionnaire regarding the self-assessment table pupils use in OneNote

Statements	Never	Rarely	Sometimes	Often	Always
I know what I want to achieve next in the English subject	3,2 %	9,7 %	31,2 %	48,4 %	7,5 %
I know how to achieve it	2,2 %	9,7 %	35,5 %	47,3 %	5,4 %

Table 4 refers to the self-assessment table the school introduced in the school year 2021/22 (see Appendix 6). The first statement in the table shows that 12,9 % rarely or never know what they want to achieve in the English subject. 31,2 % of the pupils sometimes know what they want to achieve next, while 48,4 % often do. 7,5 % of the pupils always know what they are doing next. The second statement refers to the third statement added to the self-assessment table as part of our action research (see Appendix 6). This statement was meant to be used by the pupils to explain *how* they are going to achieve what they want in the English subject. Here, 5,4 % of the pupils always know how to achieve it. Most of the pupils, with 47,3 % often know how to achieve it, and 35,5 % sometimes know how to achieve what they want to accomplish. 9,7 % of the pupils rarely know how to achieve it, and 2,2 % never know how to achieve what they want to do next.

4.1.1.3 Midterm self-assessment

Table 5: Overview of reflections in pupils' midterm self-assessments

Oral skills	29 pupils mention oral skills specific. The pupils mention that they want to develop their oral skills and/or become more orally active in class.
Written skills	30 pupils mention written skills specifically. Four pupils state that they have done well and do not reflect upon development regarding written skills. 11 of the pupils reflect on how they can develop their texts through increased focus on grammar, punctuation, structure, and/or checking for language errors.
Other	Class 1 had two questions given by teachers to reflect on as they wrote their midterm assessment, while class 2 did not have any instruction in their OneNote. Pupils in class 2 reflect upon their own learning to a higher degree than pupils in class 1 do. 29 pupils have written what they want to achieve in the English subject. 31 pupils have written how they can advance their level of competence in the English subject. Two out of 45 pupils had not written the midterm assessment.

The pupils had written self-assessments in the English subject about their achievements in the first semester, what they wanted to achieve further in the subject, and how they could develop these achievements. The length of the self-assessments varies from one sentence to a total of six sentences. A few pupils mention that they use or want to use feedback or ask the teacher for help to achieve development. Most of the pupils mention their oral or/and written competence specifically and how they can develop their competence in the English subject. For example, many pupils want to become more active in lessons by raising their hand in order to develop their English oral skills. Several pupils who specify their written competence mention structure,

content, punctuation, and grammar as areas of development. One of the classes shows a greater focus on reflecting about their strength and weaknesses in English during the half-year. Also, some pupils seemed to have the same focus in earlier self-assessments as they had in their midterm self-assessments.

4.1.2 Pupils' awareness of strengths and weaknesses

Table 6: Overview of pupils' self-awareness through feedback and self-assessment

Statements from the second questionnaire	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
I have become aware of my strengths and weaknesses in the English subject through feedback received from teachers in OneNote	3,2 %	4,3 %	10,8 %	55,9 %	25,8 %
I have become aware of my strengths and weaknesses in the English subject by writing self-assessments in OneNote	6,5 %	22,6 %	15,1 %	47,3 %	8,6 %

Table 6 shows that 81,7 % agree that they have become aware of their strengths and weaknesses through feedback from teachers in OneNote. 10,8 % of pupils are undecided about this statement. 7,5 % of the pupils disagree that they have received feedback that made them more aware of strengths and weaknesses in the English subject. 4,3 % of the pupils disagree with the claim, while 3,2 % strongly disagree. According to the statement of the pupils becoming aware of their own strengths and weaknesses by assessing themselves, 47,3 % agree with the claim, and 8,6 % strongly agree with the statement. 15,1 % of the pupils are undecided. More of the pupils disagree with self-assessment making them aware of their strengths and weaknesses than feedback received from teachers. 22,6 % disagree with the statement, and 6,5 % of the pupils strongly disagree that self-assessing work makes them aware of their strengths and weaknesses in the English subject.

I have become aware of my strengths and weaknesses in the English subject through feedback received from teachers in OneNote	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
8th grade	0,0 %	1,1 %	2,2 %	16,1 %	12,9 %
9th grade	1,1 %	2,2 %	4,3 %	17,2 %	6,5 %
10th grade	2,2 %	1,1 %	4,3 %	22,6 %	6,5 %
Total	3,3 %	4,4 %	10,8 %	55,9 %	25,9 %

Table 7 shows the distribution of answers related to the statement *I have become aware of my strengths and weaknesses in the English subject through feedback received from teachers in OneNote*. 7,7 % of the pupils disagree, 10,8 % of the pupils are undecided, and 81,1 % of the pupils agree with the statement.

Table 8: Overview of pupils' strengths and weaknesses through self-assessments

I have become aware of my strengths and weaknesses in the English subject by writing self-assessments in OneNote	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
8th grade	1,1 %	6,5 %	4,3 %	14,0 %	6,5 %
9th grade	2,2 %	7,5 %	3,2 %	17,2 %	1,1 %
10th grade	3,2 %	8,6 %	7,5 %	16,1 %	1,1 %
Total	6,5 %	22,6 %	15,0 %	47,3 %	8,7 %

Table 8 shows the distribution of answers related to the statement *I have become aware of my strengths and weakness in the English subject by writing self-assessments in OneNote*. 29,1 % of the pupils disagree, 15,0 % of the pupils are undecided, and 56,0 % of the pupils agree with the statement.

4.1.3 The use of OneNote

In the first questionnaire, we asked the pupils *what do you feel about receiving assessment in OneNote in the English subject?* This question was an open-answer question, where the answers have been categorized and summarized. Of the 95 pupils that answered the questionnaire, 73,4 % of the pupils express themselves positively to receiving feedback in OneNote. 22,2 % of the pupils mention challenges they experience when using OneNote. These challenges will be further specified in *chapter 4.1.5*. Additionally, 32,7 % of the pupils mention that the layout of OneNote is understandable and easy to use, making assessments and feedback easily accessible. 16,9 % of the pupils are positive about receiving feedback on how their work can be improved. Further, 13,7 % of the pupils explicitly mention that they use OneNote to view previous feedback when working with new assignments or tasks. A few pupils also mention that it is practical to have OneNote available at school as well as at home.

20 pupils share challenges they experience with receiving assessments in OneNote. Most of these pupils mention that they prefer receiving oral assessments. However, some of these pupils add that they find it challenging to understand the written assessment without support from the teacher. Some pupils also mention that they find receiving assessments in OneNote challenging because they do not understand the program or think it is confusing.

4.1.4 Teachers' experience with the use of OneNote

We got answers from seven of the 13 English teachers in the two classes at the school. All English teachers that answered express themselves positively about the use of OneNote. A common factor in this positivity is that it has become easier and more accessible for teachers to see and follow the pupils' work. This is mainly done by the teachers having access to the pupils' area to look at notes, give comments, and see how far they have come in working with assignments. In addition, two of the teachers highlight the user interface in the program, such as the built-in function "review pupil work". This function puts all pupils' work associated with a specific theme together and saves teachers time when reviewing pupils' work. The teachers also point out that looking at previous work is accessible since all pupil work is stored in one place. Further, the teachers point out that a shared notebook makes it easier to follow pupils'

work and comment on it. Because pupils' work is gathered in one place, the teachers believe parents can closely follow their children's schoolwork. A teacher also mentions that because every assessment is stored in OneNote, parents can access them at home. It also appears that the introduction of OneNote has made teachers more consistent in the way they give feedback. Through an increased focus on feedback reports, the teachers believe they have become better at spending time on assessments spread more evenly throughout the school year. In short informal dialogues with the English teachers at school, they express themselves positively to using more time throughout the school year compared to using a lot of time at the end of the school year to finalize pupils' assessments.

Most of the teachers think the majority of pupils find it easy to find what they are looking for in OneNote after getting familiar with the program. However, the teachers express that the youngest pupils struggled to be independent initially. The teachers have also got the impression that the most motivated pupils are more involved in their own learning since more time is spent on self-assessments in all subjects, not just in English. A teacher also points out that some pupils find it easier to look up what they are supposed to do and that the pupils have an overview of what they are going to work with in the future.

When the teachers were asked about the midterm assessment in the English subject, they are optimistic about pupils writing their own midterm assessment. The purpose of the midterm assessment is for the pupils to look at previously received feedback themselves to become aware of what they have to work on going forward in the subject. Some teachers think it is too early to say anything about the value of this, as this is the first time this form of midterm assessment has been tried out. The time aspect of when the pupils were to write their midterm assessments is also brought up. Pupils were to write midterm assessments in all subjects leading up to the Christmas holiday. Teachers mention pupils being tired of writing midterm assessments throughout the process. This was mainly because pupils having to write midterm assessments in every subject at the end of the semester. Two of the teachers mention that this was demanding for many of the pupils. The teachers express that ownership of the midterm assessments was difficult for pupils to obtain, especially for the pupils who struggle with assessing themselves. Despite this, the teachers emphasize that the pupils are precise in their self-assessments. One teacher adds that if pupils are aware of what they need to focus on, it will be easier for them to achieve just that.

In conclusion, the teachers want to exchange experiences in order to utilize AfL in OneNote to a greater extent. In particular, the teachers want the pupils to see how this work can be beneficial and its value later in their educational process. According to the teachers, the introduction of focusing on assessment at the school was to get pupils more involved in assessment work. In addition, according to one teacher, focusing on assessment to a higher degree throughout the school year will lead to more relevant feedback since it is given when assignments are fresh in memory.

4.2 Assessment

This section will present findings from both pupils' questionnaires about expectations and experiences regarding assessments from teachers and self-assessments. We will also present differences we have found interesting across the 8th, 9th, and 10th grades.

4.2.1 Preferred type of feedback

We were curious about what pupils want to receive feedback about before starting our observations and text analysis. Therefore, we asked the pupils *What do you want to receive feedback about?* This question allowed the pupils to check several of the answer options. The question was divided into seven broad answer options, ranging from language use, language errors, positive affirmation, task solving, content, the use of previous feedback, and other. The answer option *other* was an option if the respondents felt that none of the alternative options were fitting. This gave the respondents the chance to describe their preferred way of receiving feedback in their own words.
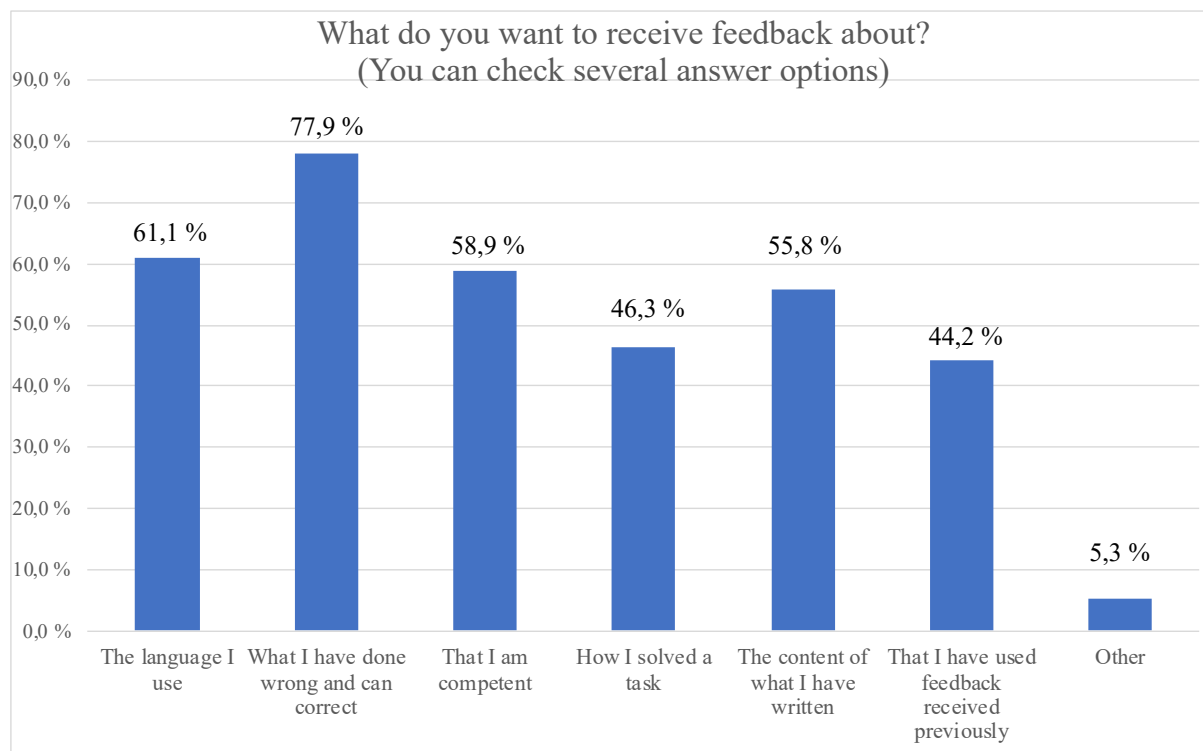
What do you want to receive feedback about?
(You can check several answer options)

Figure 2 - Overview of what pupils want to get feedback about

What the pupils like to get feedback about differs slightly, with one of the answer options standing out compared to the rest. The responses show that 77,9 % of the pupils prefer to get feedback about something they have done and can correct. 61,1 % of the pupils favor receiving feedback about their language, while 58,9 % of the pupils want feedback giving positive affirmation. Just over half, 55,8 % of the pupils, prefer to get feedback about the contents of what they have produced. 46 % of the pupils want to be assessed on how they solve tasks. A few less wanted to receive feedback about their use of previous feedback in the following work. 5 % of the pupils selected the answer option *other*. These answers could be placed under an alternative option, or the answers supply little to no relative context.

There are factors that can be further explored based on the answers given. In both questionnaires, the respondents informed us whether they were in 8th, 9th, or 10th grade. This allowed us to compare the distribution of answers across the three grades. Highlighting differences in distribution between grades could be done with all answer options. We, however, want to point out a few answer patterns we find interesting relating to the grades the pupils were in.
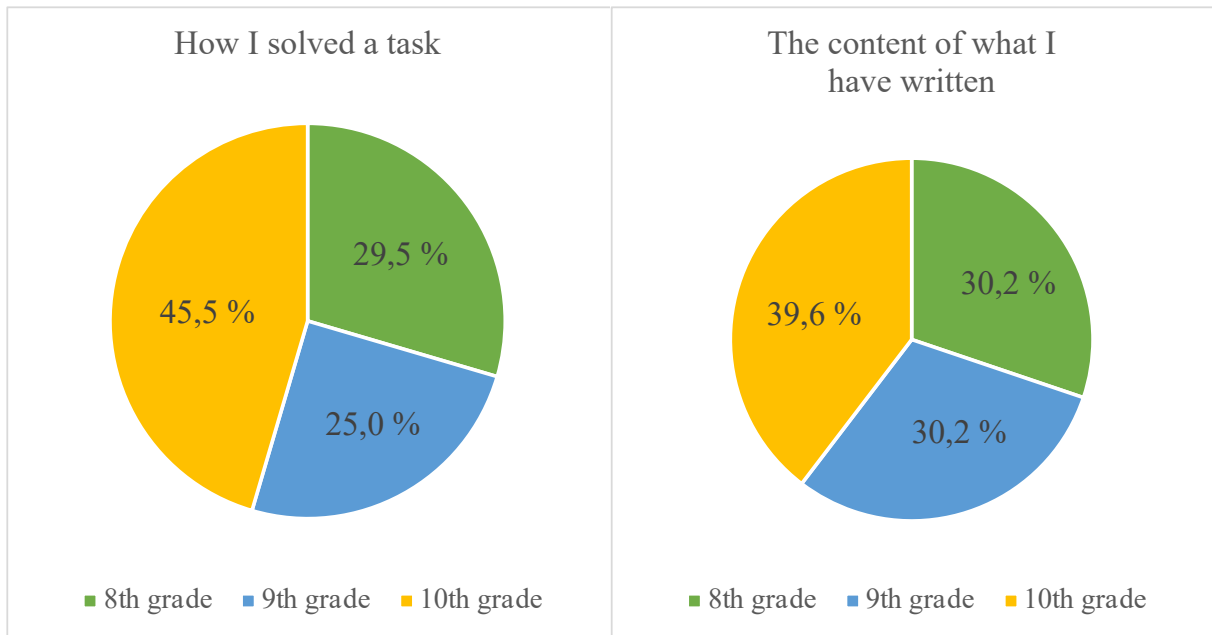
Figure 3 - Distribution of preferred feedback depending on grades

45,5 % of the pupils that answer that they like to receive feedback about how they solve a task are 10th graders. Both 8th and 9th graders are less hesitant towards receiving feedback about how they solve a task, with 29,5 % of 8th graders and 25 % of 9th graders stating that they like to receive this form of feedback.
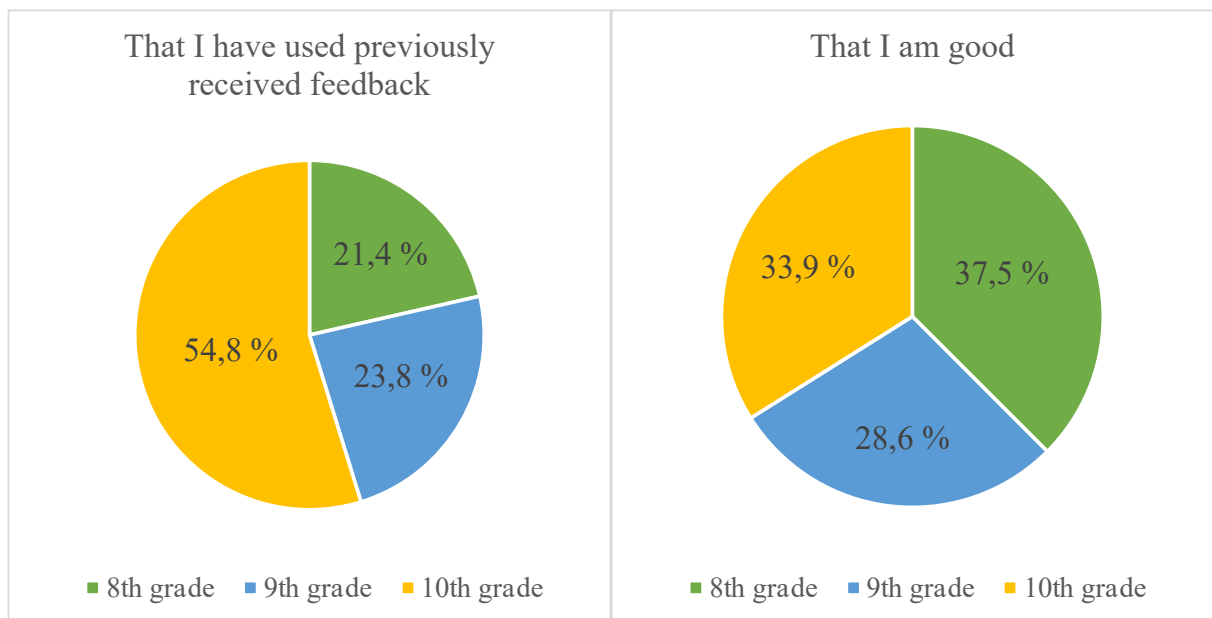

Figure 4 - Distribution of preferred feedback depending on grades cont.

We can see a similar pattern amongst answers relating to the use of feedback from previous work. Here, 54,8 % of the pupils that select this answer option are 10th graders. There is a slight decrease in 8th and 9th graders related to this option, with 21,4 % of the ones answering being

8th graders and 23,8 % being 9th graders. The same, however, cannot be said about receiving feedback about positive affirmation. Of the 58,9 % of the pupils wanting feedback giving them positive affirmation, 37,5 % are 8th graders, 28,6 % are 9th graders, and 33,9 % are 10th graders.
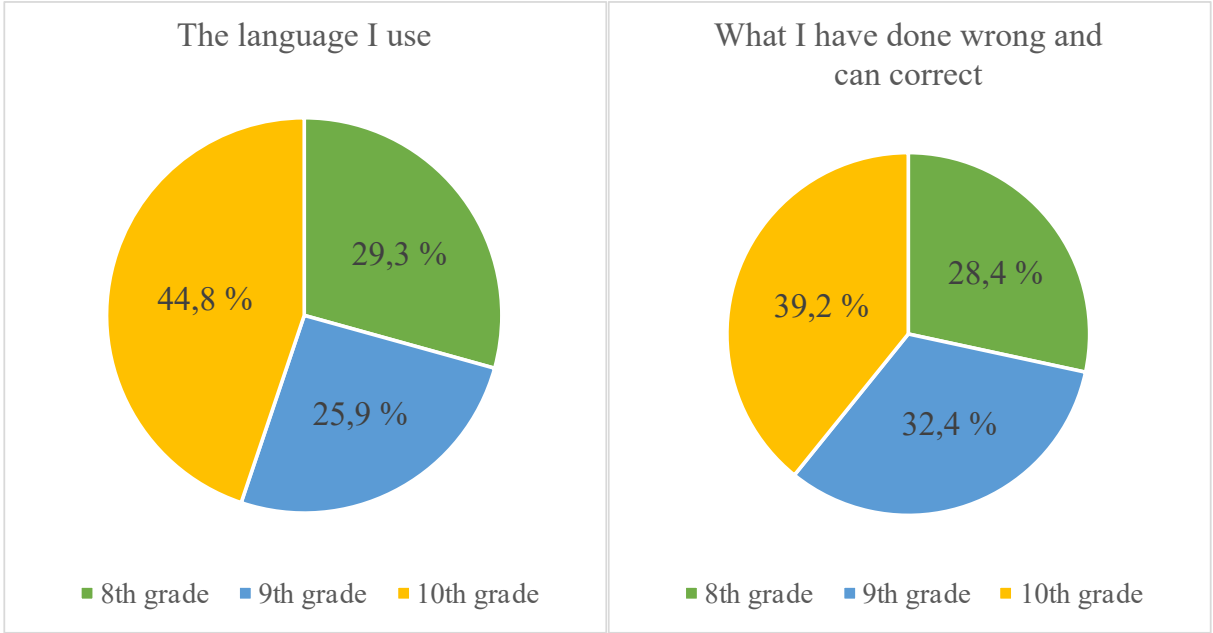

Figure 5 - Distribution of preferred feedback depending on grades cont.

Figure 5 shows the distribution of wanting feedback about the language the pupils use is almost the same across 8th and 9th grade. 29,3 % of 8th graders and 25,9 % of 9th graders want to receive feedback about their language use. However, almost half of the pupils that prefer feedback about their language are 10th graders, with 44,8 %. The same distribution is recurring in receiving feedback about what the pupils have done wrong and can correct. Here, 28,4 % of 8th graders and 32,4 % of 9th graders prefer this type of feedback. Fewer 10th graders, with 39,2 %, want to receive this type of feedback about work they have done.
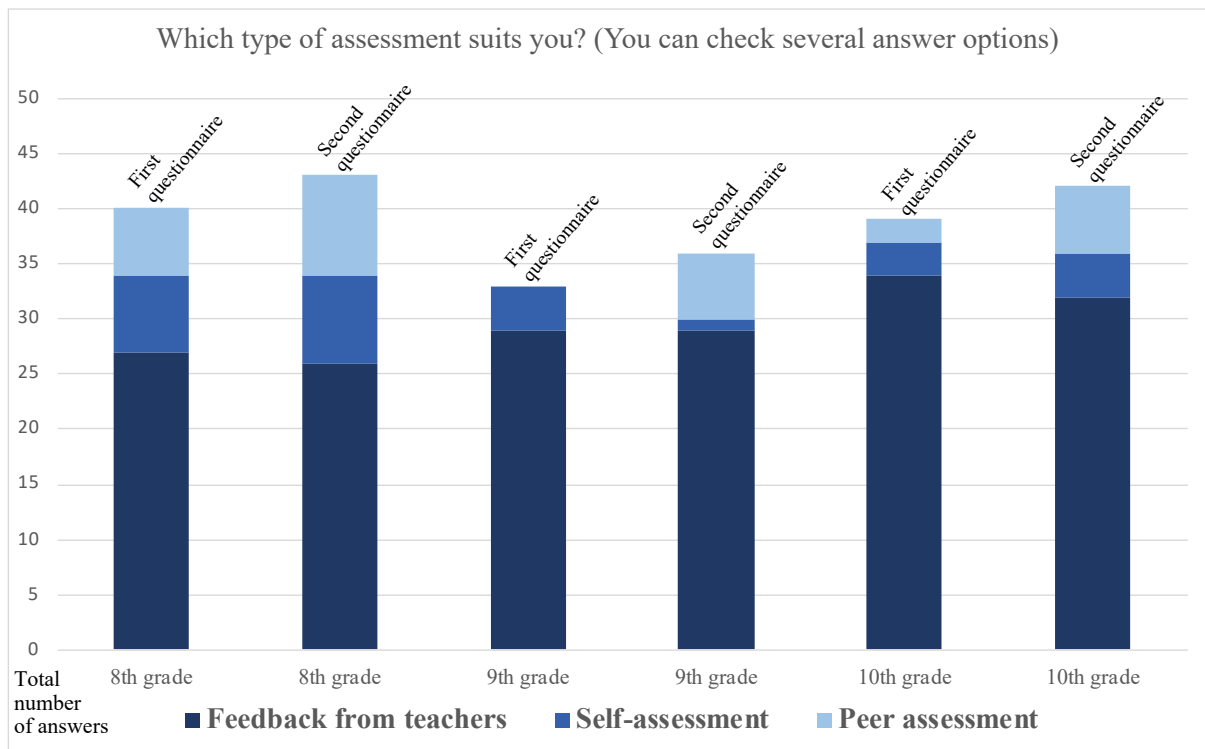
Figure 6 - Distribution of which type of assessment pupils think suits them

The question *Which type of assessments suits you?* was included in both questionnaires. The answers from both questionnaires are presented in *figure 6*, along with answers across the three grades. The pupils could check several answer options, resulting in more answers than actual pupils. Based on the two questionnaires, the pupils are heavily reliant on feedback from teachers. Out of the 188 total answers relating to the questionnaires, 76 % of the pupils opt for feedback from the teacher as suiting them best. Peer assessment is preferred by 12,4 %, and 11,6 % of the pupils think self-assessment suits them best.

Referring to *figure 6*, there are some differences in answers within all three grades, with the two higher grades varying more than the lowest. These variations are primarily in answers related to peer assessment. None of the 9th graders answer that peer assessment suit them best in the first questionnaire, while 5 % answer that it suits them in the second questionnaire. This tendency occurs in all three grades. 5,4 % of 8th graders think that peer assessment suits them best in the first questionnaire, while 7,4 % think it does in the second questionnaire. The growth was slightly higher in 10th grade. 1,8 % think it suits them best in the first questionnaire, while 5 % checked this answer option in the second. There was a slight decrease among pupils in all three classes that selected feedback from teachers in the second questionnaire compared to the first. The difference is highest in 10th grade, where 4 % fewer pupils think it suits them best.

2,6 % fewer 8th graders and 1,9 % fewer 9th graders select feedback from teachers in the second questionnaire.

4.2.2 Importance of feedback

In the first questionnaire, we asked the pupils what they think is most important with the assessment they get. The question was a multiple-choice question with a total of seven answer options, and the pupils had the option to select several answers. The options varied from knowing how the pupils can develop themselves, if they experience accomplishment in finished work, get a better understanding of their own learning, get to know their academic level, show what they can in various ways, and obtain the desire to learn the option *other*. This answer option was added if any pupils wanted to add something different from the six alternative answer options.
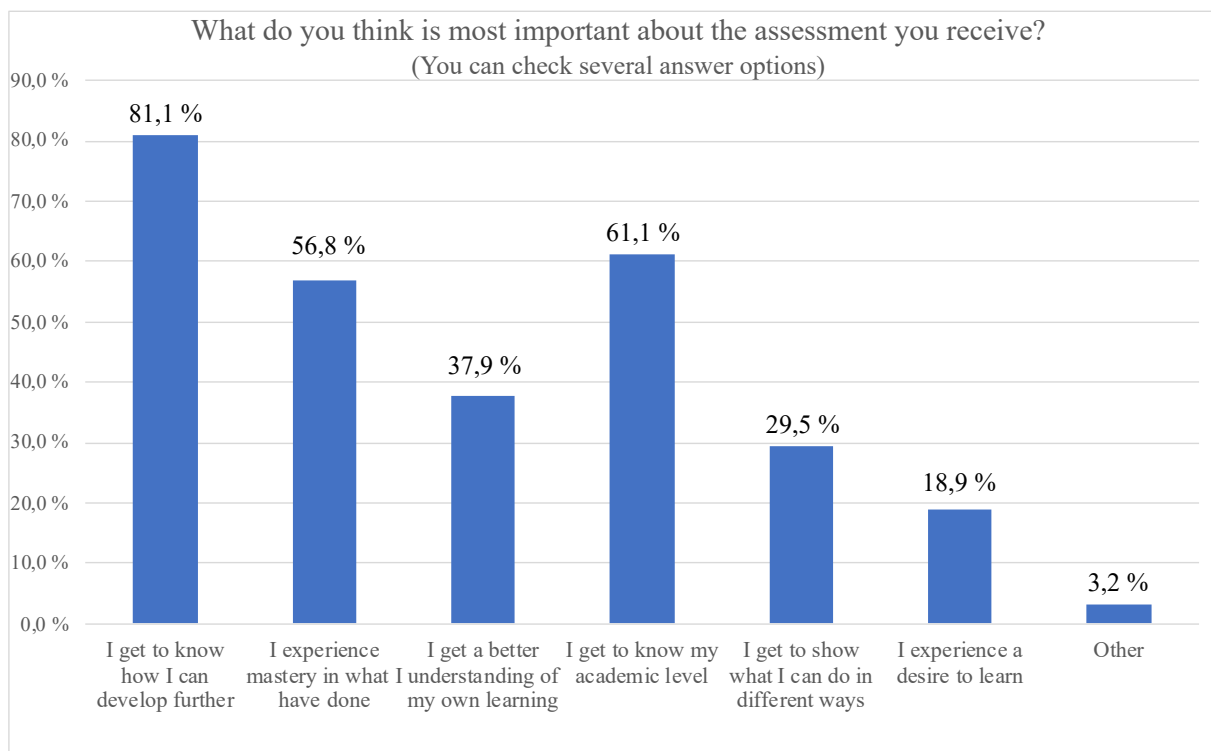

Figure 7 - Overview of what pupils think is most important with the feedback they get

What the pupils think is important to receive feedback about varies greatly. Our respondents think that receiving feedback about how they can further develop their English skills is important, with 81,1 % of the pupils answering that this is the most important to get feedback about. The second most important thing to receive feedback about, at 61,1 %, is receiving

feedback about their academic level. Further, 56,8 % think receiving feedback that will contribute to experience mastery in what they have done is important. At the lower end of the spectrum are the two answer options about showing what the pupils can do in various ways as well as acquiring the desire to learn, with 29,5 % and 18,9 % of the pupils selecting them, respectively. 3,2 % of the pupils answered other. When given the option to explain what these pupils think is important with receiving feedback, their answers were either unrelated to the topic or gave little to no context to the question.
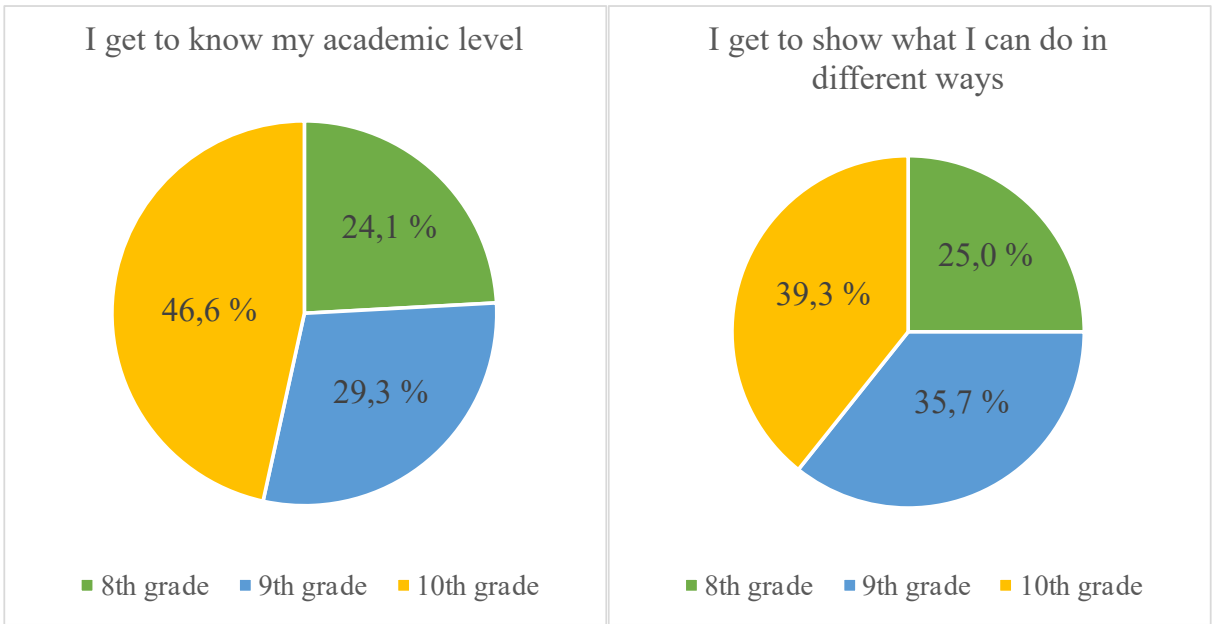

Figure 8 - Distribution of important feedback depending on grades

Figure 8 shows the difference in the distribution of answers between the three grades. Similar to what the previous figures presented, we can see a distinct difference in class distribution. Almost half of the pupils, with 46,6 %, who answer that feedback about their academic level are 10th graders. 29,3 % of the pupils are 9th graders. We can see a further decrease in 8th graders selecting this option at 24,1%. When asked about being able to show their competence in different ways, a quarter of the pupils answering are 8th graders. 35,7 % of the respondents are 9th graders, and 39,3 % are 10th graders.
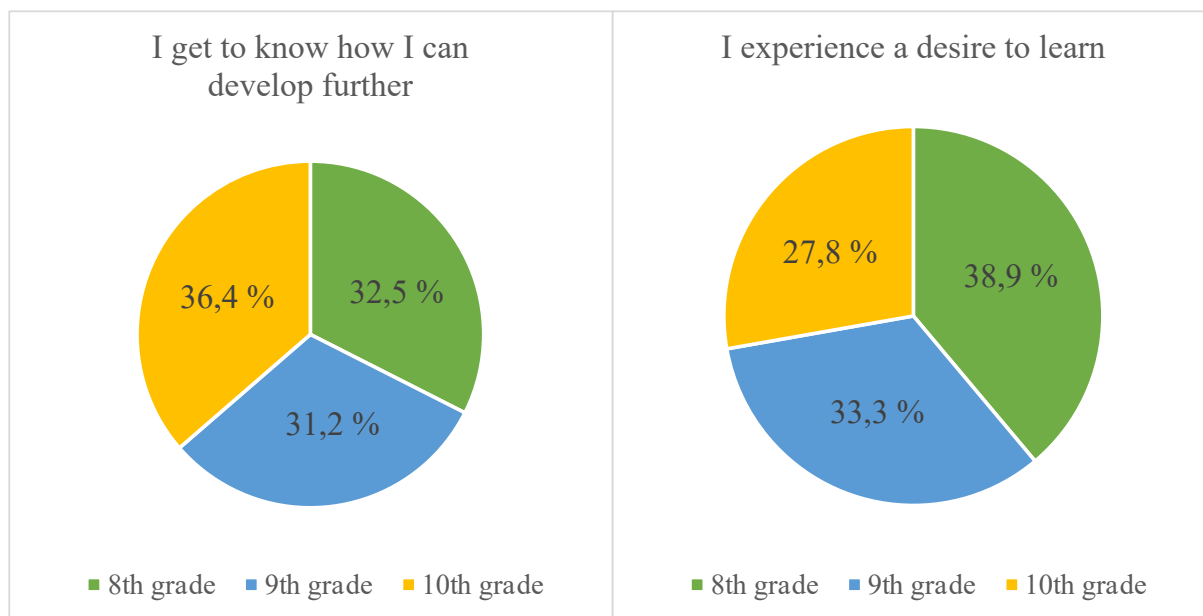
Figure 9 - Distribution of important feedback depending on grades cont.

Interestingly, the distribution of the importance of feedback about how the pupils can further develop their English skills is less divided. Here, 32,5 % of the pupils that answer are 8th graders. Fewer 9th graders, with 31,2 %, want feedback about how to increase their competence in English. The majority with 36,4 %, are 10th graders. Intriguingly, when the pupils were asked about their willingness to learn, we see a shift in answer patterns. 27,8 % of the pupils selecting this answer option are 10th graders, with the majority of pupils seeing the importance of willingness to learn being in 8th and 9th grade. A third of the pupils selecting this option are 9th graders, and 38,9 % are 8th graders.

Table 9: The statements refer to support from teachers without asking for it

Statements	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
The teacher gives me support and help in the English subject when I ask for it / give a signal	0,0 %	0,0 %	7,4 %	27,4 %	65,3 %
The teacher tells me what I should do in order to get better in English without having to ask about it	2,1 %	13,3 %	8,4 %	45,3 %	30,5 %

According to *table 9*, over 90 % of the pupils strongly agree or agree that they get support from a teacher when they ask for it. The last 7,4 % answer that they are undecided. Further, 75,8 % of the pupils have experienced support from a teacher without asking for it. 13,3 % of the pupils disagree with the statement, while 2,1 % strongly disagree about a teacher telling them what to do in order to become more efficient in English. 8,4 % of pupils are undecided about the statement.

4.2.3 Receiving useful and timely feedback

Table 10: An overview of pupils' experience with useful feedback

Statement	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
I use the feedback I receive from my teacher (questionnaire 1)	2,1 %	0,0 %	9,5 %	48,4 %	40,0 %
I use the feedback I receive from my teacher (questionnaire 2)	2,2 %	6,5 %	7,5 %	45,2 %	38,7 %

The statements presented in *table 10* were included in both pupils' questionnaires. The pupils agree for the most part, with 40 % and 38,7 % strongly agreeing with the statements in the first and second questionnaires, respectively. 48,4 % of the pupils agree in the first questionnaire, while 45,2 % agree in the second. Some pupils are undecided in both questionnaires, with 9,5 % and 7,5 % being indecisive. None of the pupils disagree in the first questionnaire, while 6,5 % of the pupils disagree with the statement in the second one. Almost the same percentage strongly disagree with both questionnaires, with 2,1 % of the pupils in the first and 2,2 % of the pupils strongly disagree with the second questionnaire statement.

This statement in the first questionnaire was followed by a statement depending on which answer the pupils picked, except if the pupils chose the undecided option. If the pupils either chose to agree or strongly agree with the statement in *table 10*, they were supposed to write reasonings as to why they use the feedback they receive from their teachers. The pupils were also presented with one more statement if they disagree or strongly disagree with the statement in *table 5*. This was done because of our desire to get an insight into the pupils' reasoning as to why the feedback they receive is useful and vice versa.

Nearly all pupils who answer that they got use of the feedback they receive state that the feedback they got can be categorized into four main categories. One of the reasons is that the feedback received can be used to enhance assignments relating to both language errors and structural changes. Another reason is that feedback helps pupils develop their oral and written English skills and competence. The pupils also want specific feedback about what is good and what can be improved in order to help them become more competent in the English subject. Another reason for receiving useful feedback is that it would help the pupils to gain a higher level of achievement. Some pupils state reasons as to why the feedback they get is not useful to them. These reasons, however, lack arguments and are mainly a result of pupils not caring to answer. Some of the answers state that the pupils did not know why, but most answers included just a period symbol.

Table 11: An overview of pupils' experience with receiving feedback within a reasonable amount of time

Statement	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
The teacher gives me feedback on written tasks in a reasonable amount of time after the submission	1,1 %	14,7 %	12,6 %	46,3 %	25,3 %

Table 11 refers to teachers giving feedback on written tasks within a reasonable amount of time after they have been handed in. Most of the pupils agree with the statement, where 25,3 % of the pupils strongly agreeing and 46,3 % agreeing with the statement. However, 12,6 % of the pupils are undecided about receiving feedback within a reasonable amount of time. 14,7 % of the pupils disagree, and 1,1 % strongly disagree.
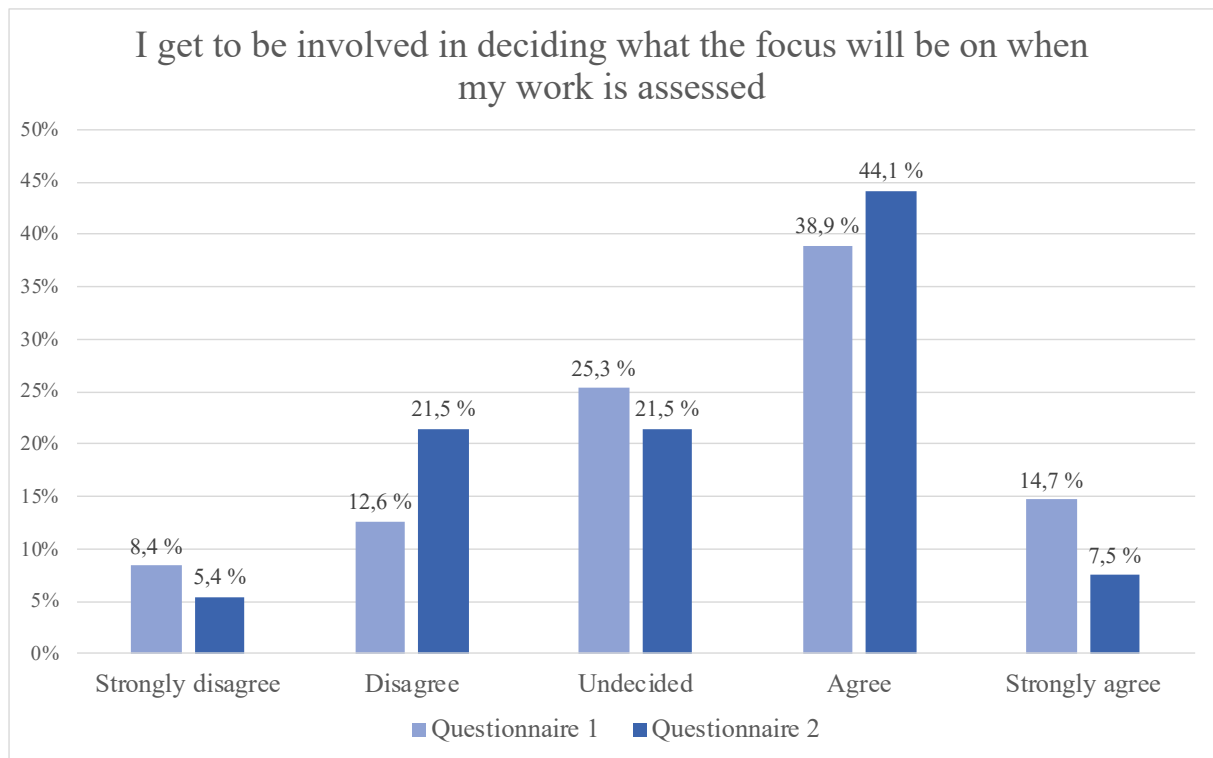
4.2.4 Pupils' involvement in assessment

Figure 10 - Distribution of pupils' involvement in assessment

The pupils were presented with a statement about their involvement in deciding what the focus will be on when their work is assessed. In the first questionnaire, 53,6 % of the pupils agree to have a saying in what will be assessed, of which 14,7 % strongly agree with the claim. However, a quarter of the pupils are undecided about the statement in the same questionnaire. 21 % of the pupils in the first questionnaire disagree with the statement, of which 8,4 % of the pupils strongly disagree. Fewer pupils agree with the statement in the second questionnaire compared to the first one. Here, a total of 51,6 % of the pupils agree, and 7,5 % strongly agree. The same tendency could be seen in answers that are undecided, with 21,5 % of the pupils choosing this answer option. Also, more pupils disagree with being involved in deciding what will be assessed in their work in the second questionnaire. 21,5 % of the pupils disagree, and 5,4 % strongly disagree with the statement.

When comparing the two questionnaires, there is a decline of 51 % of pupils that strongly agree with being involved in what will be assessed in the second questionnaire compared to the first. However, the decrease is not as drastic when comparing all pupils that agree with the claim, with a 3,7 % decrease from the first to the second questionnaire. Comparing pupils who disagree with the statement, more pupils disagree in the second than in the first questionnaire. There is

a growth of 21,9 % in pupils who disagree with being involved in what will be assessed in the second questionnaire. The decrease of pupils who agree with being involved in what will be assessed and the growth of pupils who disagree with the statement is a negative tendency in pupil involvement.

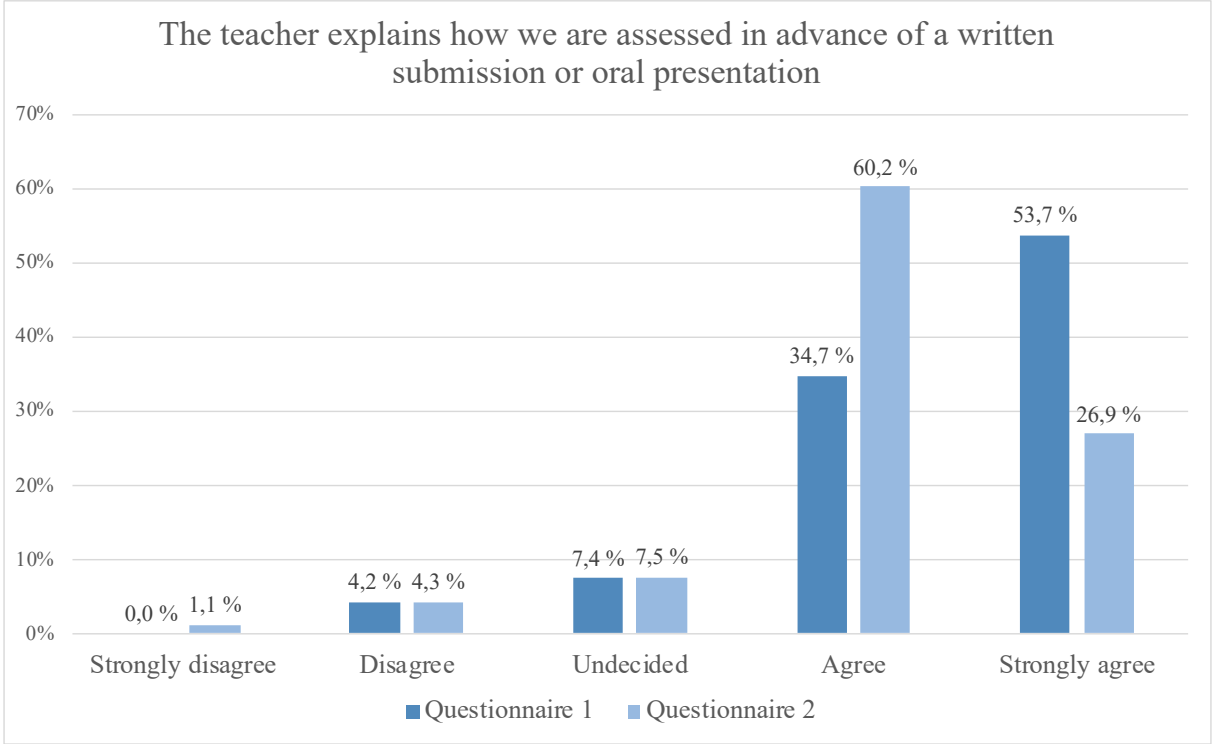## 4.2.5 Teachers explaining what will be assessed

Figure 11 - Distribution of pupils' knowledge of what will be assessed

The statement relating to teachers explaining how written or oral work will be assessed prior to handing them out was included in both questionnaires. In the first questionnaire, 53,7 % of the pupils strongly agree with the claim, and 34,7 % agree with the statement. 7,4 % of the pupils are undecided. None of the pupils strongly disagree with teachers explaining what will be assessed in advance, whereas 4,2 % of pupils in the first questionnaire disagree. Almost the same number of pupils are undecided and disagree with the statement in the second questionnaire. 1,1 % of the pupils strongly disagree, 4,3 % disagree, and 7,5 % are undecided. There is, however, a considerable shift in pupils that agree with teachers explaining what will be assessed in the second questionnaire compared to the first questionnaire. 60,2 % of the pupils agree with the statement, and 26,9 % strongly agree in the second questionnaire. The decrease in pupils who agree with the second questionnaire's statement compared to the first is 57,6 %. The decrease in pupils that strongly disagree is 50,1 % when comparing the two questionnaires.

5 Discussion

This chapter will discuss our findings in this thesis with support from the theoretical framework and the strengths and weaknesses of the methodology used. In addition, this chapter entails to discuss and present suggestions regarding our research questions based on our main research question. Our main research question is:

> How can assessment for learning contribute to lifelong learning with the use of digital tools in the English subject at lower secondary school?

The two specific research questions to further specify the main research question are:

> What are pupils' experiences with assessment?

> What are pupils' and teachers' experiences with feedback and self-assessment in OneNote Class Notebook?

Our discussion is divided into two main parts, where the first part discusses our findings related to AfL and the second part discusses our findings related to assessment in general.

5.1 Assessment for learning in OneNote

This section will discuss pupils' and teachers' attitudes towards using OneNote, challenges with using OneNote for AfL, pupils' self-assessments, pupils' awareness of strengths and weaknesses, assessment awareness among teachers, and language learning.

5.1.1 Pupils and teachers are positive about the use of OneNote

Most of the pupils express themselves positively about the use of OneNote for assessments. Answering the open question presented in section 4.1.3, *What do you feel about receiving assessment in OneNote in the English subject?*, several of the pupils mention that it is useful to receive assessments in OneNote because they experience it as easier to find earlier assessments in the application where it all are gathered. Another reason many pupils mention is that they like to get feedback that tells them what they need to improve. These two reasons show that the pupils find the assessments given in OneNote valuable and that they use the assessments to learn from. This indicates that the assessments provide learning through the use of OneNote and that the intention behind "My lifelong learning" has been achieved to some degree. Another

reason pupils mention as positive with OneNote is that the application is available at home as well as at school. Because of the cloud storage used in OneNote, it is possible to access schoolwork with an internet connection. We could argue that storing pupils' work in OneNote is more practical than every pupil storing their files on their own computers. If every pupil is storing their files on their own computer instead of OneNote, they are the only ones that can access their work.

Feedback needs to contain understandable information that will improve and develop the pupil's learning through reflections (Gamlem, 2022, p. 21). Through the analysis of both questionnaires, we realized that the pupils seem to be generally satisfied with the assessment practice at the school. Therefore, we used the claim *I use the feedback I receive from my teacher* in both questionnaires. In both questionnaires, over 80 % of the pupils agree and strongly agree (see *table 10* in section 4.2.3) with the statement. In the first questionnaire, we followed the claim with the statement *I use the feedback I get from the teacher because…* to get an insight into the pupils' reflections about useful feedback. Through analysis of their written answers, several pupils state that they use previously received feedback to develop their English skills in assignments. Some pupils claim that feedback makes them more aware of their strengths and weaknesses when working on their assignments and that it can help them get a better understanding of what is good and what needs to be improved. This is connected to what Gamlem state that a feedback should contain, and to Brookhart's (2008, p. 2) cognitive factor about giving feedback that helps the pupils understand where they are in the learning process and what needs to be developed.

The teachers share positive experiences with the use of OneNote as a digital tool for assessment in section 4.1.4. They state that having a digital tool such as OneNote has made schoolwork more available for pupils. Teachers further state that it has become easier to find and follow pupils' work compared to before they started using the program. Using digital tools can help teachers get an overview of pupils' work (Lothe, 2017). One of the intentions behind using OneNote for AfL was to follow the development of each pupil throughout their schooling at the lower secondary school. This indicates that the implementation of OneNote has had a positive effect towards this intention. Generally, we can assume that it is common for teachers today to store their own assessments of pupils on their own computers. Teachers can store all pupils' assessments in separate notebooks or pages in OneNote. This makes it more accessible to find previous assessments. This could lead to teachers using less time when grading work at midterm and at the end of the school year. Earlier assessments are also used in parent-teacher

and development talks, and the use of OneNote will probably make teachers save time since all assessments are stored in one place. This can be related to Lothe's (2017) findings about the teachers' positive experiences through the use of digital tools in the assessment process. She also presents findings that teachers can give new forms of assessment because of the functions of digital tools. Lothe further states that the use of digital tools leads to a higher quality in pupils' texts than before the introduction of the application Showbie. The school's focus on lifelong learning aligns with NDEAT's commitment from 2010 to 2018 to continue to involve pupils to a greater extent in their learning.

5.1.2 Challenges with using OneNote for assessment for learning

Unfortunately, but not surprisingly, the work in OneNote is showing signs of the school being in the starting phase where the practice has not been implemented properly yet. This came to light when we analyzed how teachers and pupils use OneNote. Through observations in the classrooms, we observed that the teachers started by explaining and sometimes sharing their screen to show the pupils what they were going to do using OneNote. A few pupils asked the teachers or other pupils for help to find the correct place in OneNote. We also observed that some pupils had trouble submitting tasks but got help from teachers or other pupils. Except for these situations, it seemed like the pupils were familiar with the use of the application to find what they were supposed to. However, a few pupils address that they find receiving feedback in OneNote challenging in section 4.1.3. The pupils that find it challenging to use OneNote are not only the youngest pupils, as the teachers suggested. Looking at the answers given in the first questionnaire, we see that a few pupils across all three grades find it challenging to use OneNote regarding feedback and general usage of the program. The reasoning for finding it difficult among pupils vary. Some of the pupils mention that they would like more support from teachers. However, most of the pupils that find feedback and assessment in OneNote challenging mention that the reason primarily is based on being nervous and anxious about receiving feedback.

The practice of giving feedback in OneNote varied in the two classes. We saw great differences between the classes regarding to the total amount of teacher feedback and pupils' self-assessments in OneNote. One of the classes had most of the total amount of feedback from the school year given by the teachers and self-assessments in OneNote, while the other class had missing feedback from both teachers and self-assessments. This could further emphasize that some teachers are using other methods of storing and filing pupils' assessments. There are

several dilemmas concerning not using OneNote to store assessments. Therefore, the transparency meant to be created about gaining insights into pupils' assessments can relapse. This problem was highlighted by two of the teachers in their questionnaire. The teachers state in section 4.1.4 that although OneNote is "neat and efficient" while going through pupils' work, they still feel that they need to have their own overview of feedback and assessment for each pupil. Therefore, the lack of feedback in OneNote will presumably be related to teachers having their own filing system for feedback and not submitting them to OneNote. The reasons for the lack of self-assessments among the pupils could be many. However, some reasons are more prominent than others. The school year has been affected by Covid-19 restrictions through the school year. Another reason can be that some pupils get oral feedback and share their reflections with the teachers orally. If that is the case, teachers need to find a solution for these pupils to keep track of their lifelong learning. Pupils also need to see that they can benefit from assessing themselves (Burner, 2018, p. 250). These are factors that can influence the pupils' willingness and motivation to work with assessing themselves.

Some pupils expressed their desire to receive oral feedback regardless of the assignment being oral or written in section 4.1.3. These pupils find it hard to understand written feedback without support from their teacher. There could be various reasons why that is the case. We know that there are pupils who struggle with reading and writing difficulties. Reading and understanding feedback that teachers have given can therefore be more difficult for the pupils who struggles (FitzPatrick & McKeown, 2020, p. 21). Adapting feedback to the intended receivers is a challenging task. Teachers need to take into account pupils' language competence. This would include adapted language to ensure keeping misconceptions to a minimum. In order to target language to different pupils, teachers need to understand their English proficiency by getting to know how each pupil's writing style and ability. One possible option to satisfy pupils that prefer receiving oral feedback with digital tools is using built-in extensions in OneNote to record voice notes while correcting pupils' work. However, we have not seen traces of this practice being applied by the teachers in OneNote so far.

5.1.3 Self-assessment

Most pupils state in *table 4*, section 4.1.1.2, that they either often or sometimes know what they want to achieve next in the English subject and how they are going to approach it. Both statements refer to two of the questions in the self-assessment table pupils use in OneNote (see Appendix 6). In addition, these questions regard our contribution to enhancing the self-

assessment table the school uses is inspired by Hattie and Timperley's article *The Power of Feedback* (2007). Even though almost half of the pupils answer that they often do to both statements, there is over 30 % stating that they sometimes know what and how to approach what they want to achieve next. This indicates that those who answer sometimes know what they want to achieve, and how to achieve it, also, sometimes do not know what and how to do just that. A few pupils state that they never or rarely know what and how to achieve next. The question then is how the teachers can facilitate and help pupils to reflect upon their own learning. Hattie and Timperley (2007) apply how effective these questions are depending on the pupils' personal level, their understanding of the task, and the level of feedback.

By analyzing the self-assessment tables of the 45 pupils in OneNote, we got an insight into how pupils reflect upon their own learning with the use of the self-assessment table, see *table 2*, section 4.1.1.1. The analysis indicates that there are differences in pupils' levels of metacognition. This might not be surprising considering age differences, maturity, level of achievements, and motivation. Most of the reflections were answered within one sentence to each question. The pupils reflect to a varying degree. The ability to understand what is good and what needs improvement in their work depends on the maturity of the pupil (Imsen, 2020, p. 498). However, the purpose of self-assessment is to help the pupils practice being independent and develop critical reasoning of their own learning. Here, the teachers should think of how they can facilitate independence in the way pupils work with self-assessment. We did not see that teachers gave any feedback to pupils' self-assessments, but we assume that it could help pupils improve their reflections around their own learning. That would be individual-specific assessment that pupils learn from (Gamlem, 2022, p. 36).

According to *table* 5, section 4.1.1.3, class 2 shows more reflection of their own efforts and learning in the midterm assessment than class 1 did. Based on these evaluations, we discovered that class 1 had an instruction with two questions to answer, while class 2 did not receive any instruction in OneNote. The instruction in class 1 was as follows: "Based on this semester, you are supposed to write a self-assessment in each subject by answering these two questions: What do you want to achieve in the subject? How can you achieve that?" (Our translation). However, it appears that these questions have decreased the pupils' ability to self-reflect on their own learning as they ended up answering the questions instead of reflecting on their own learning. We can assume that the higher rate of reflection in Class 2 is because of different instructions. This raises a new question about the questions and self-assessment table. Could the questions and the self-assessment table which are made in the faith of being helpful, end up decreasing

pupils' reflection. This would contradict Hattie and Timperley's (2007) effective feedback questions. If that is the case, the teachers must reflect, discuss, and be critical about these "guiding" questions with each other. The teachers should also reflect upon what the aim of the self-assessment is. Moreover, it could be that even though the pupils in Class 2 did not have the questions in front of them, they benefit from previously work with self-assessments.

The pupils tend to write their self-assessments based on the teachers' feedback, according to *table 2* in section 4.1.1.1. The English teachers usually ask their pupils to write self-assessments in "My lifelong learning" after receiving feedback from the teachers in OneNote. This means that the pupils can, and probably many of them do, read the assessment from teachers before they write their own self-assessment. On the one hand, this form of practice will help the pupils see their strengths and weaknesses to evaluate themselves further. It will also benefit the pupils who struggle as it could provide guidance to connect their working process with the end result (Brookhart, 2008). This is also an opportunity for the teachers to model what the pupils could assess and how they can write their self-assessment. The practice could be linked up to the competence aims after Year 10 that states that pupils are expected to be able to "revise one's own texts based on feedback and knowledge of the language" (NDEAT, 2019b). On the other hand, we believe that this practice can reduce the reflection on one's learning among the pupils as they already know what the teachers think about their work. The analysis shows that eight out of the nine pupils who had copied the teacher's feedback into "My lifelong learning" reflected in relation to what the teacher had commented. This indicates that there are probably several pupils who have done the same. However, if teachers ask their pupils to write self-assessments before they have received the teacher's feedback, it could lead to more independent pupil reflections. Teachers could use these independent reflections to provide adapted feedback that is based on the pupils' self-regulation (Hattie & Timperley, 2007, p. 94). Moreover, if the teachers' comments are based on the pupils' self-assessments, it could lead to specific assessments that pupils will benefit from, in other words, AfL. If pupils focus on self-assessment, they can take more responsibility for their own learning. This could be done by shifting the focus of who is responsible for dictating pupils' learning. The change can be approached in various ways. The transition in this project has been approached by using the self-assessment table (see Appendix 6). The ideal outcome of using the table would be for pupils to become more independent relating to what they want to accomplish going forward and how they would like to approach the desired learning.

After analyzing the pupils' self-assessment tables, we realized that it is general and static. In order to adapt the table to specific themes or assignments, the teachers could change the wording of the questions to be more specific to the topic. In order to adapt the table to specific themes or assignments, the teachers could change the wording of the questions to be more specific to the topic. For example, according to *table 2*, the pupils answer the questions in the self-assessment table by mentioning their achievements, ways to improve, and learning strategies that can be used to achieve what they want to accomplish as the intention of the table is. However, the reflection of own learning varies.

5.1.4 Awareness of own learning

Based on the results presented in *table 6*, section 4.1.2, 47,3 % of the pupils agree, and 8,6 % strongly agree that self-assessment in OneNote has made them more aware of their strengths and weaknesses. The findings indicate that pupils still need support and guidance from a teacher to become aware of their own learning. This could be seen with the finding that pupils want assessments that tell them what is correct and incorrect from *figure 2* in section 4.2.1. If we conflate the parts who agree and strongly agree that they have become more aware of their strengths and weaknesses by writing self-assessments, we get an answer rate of 55,9 %. This agrees with Burner (2018, p. 250), who claims that working with self-assessment will lead to awareness of the strengths and weaknesses of one's own learning. This, again, leads to more consciousness of one's learning process. Imsen (2020, p. 498) states that self-assessment requires the ability for pupils to use metacognition. Pupils who become more aware of their strengths and weaknesses have likely developed their metacognition. Several studies show that pupils who have an active metacognition have advantages in manage learning situations better and that they are more able to use their own strategies compared to pupils who rarely reflect on their learning (Haukås, 2014; Haukås et al., 2018; Wenden, 1998). In other words, by increasing pupils' metacognition, they will be able to take more responsibility for their own learning and become more involved. Responsibility and involving pupils were two of the achievements the school wanted to accomplish with the implementation of "My lifelong learning". However, since over half the pupils state that self-assessment has made them more aware, the school still has some improvements to make within the field.

Almost 30 % of the pupils disagree that working with self-assessment in OneNote has made them more aware of strengths and weaknesses, according to *table 6*. There are factors that could influence the pupils' ability to self-reflect, such as the pupil's maturity (Imsen, 2020, p. 498).

In the section *Learning to learn* in the core curriculum, it is mentioned that some pupils will find it challenging to reflect on their own learning and that it requires a broad approach from schools to benefit for a lifelong learning (NDEAT, 2017). We believe that working with self-assessments frequently over time, as the pupils have done, should make them more conscious of their learning. However, Munden and Sandhaug (2017, p. 127) explain that self-assessment concerns pupils' ability to reflect on their own effort and how they learn in various situations. Through analysis of pupils' OneNote, we noticed that there was a lack of reflections about how they learn in various situations in the self-assessments. All three self-assessments in Class 2 were self-assessments of written assignments, while in Class 1, there was one self-assessment concerning an oral assignment in addition to three written assignments. Asking the pupils to evaluate themselves more often in different situations, not only regarding assignments, could expand their reflections as they get more learning strategies to compare to. Another option to help pupils improve their awareness from self-assessment could be to involve the pupils from the start. Most of the pupils agree and strongly agree to being involved in the decision of assessment criteria. However, in both the first and second questionnaires, over a fifth of pupils disagree or strongly disagree, and over a fifth of pupils are undecided.

In the Pupil survey, 10th graders in Norway score 2,6 out of 5,0 concerning being involved in assessment for schoolwork (NDEAT, 2022b). *Figure 10*, section 4.2.4, show that pupils in this study answer roughly the same as the ones in the Pupil survey. This finding indicates that the school, together with other schools across the country, needs to involve the pupils more. NDEAT's (2019c) commitment of AfL concluded that involving pupils were one of the points to continue develop. This comes to light in LK20, which states that teachers shall involve pupils in the learning process (NDEAT, 2019b). Involving pupils will make them take more responsibility for their own learning.

Moreover, pupils state that they have become more aware of their strengths and weaknesses through assessments from teachers in OneNote. 55,9 % of the pupils agree and 25,8 % strongly agree with becoming more aware of strengths and weaknesses through assessment from teachers. Conflating both these answer options gives us an answer rate of 81,7 %. 8th graders tend to be more certain about becoming more aware of their strengths and weaknesses through assessment from teachers than the older pupils. In contrast, pupils who strongly disagree, disagree, and are undecided are mainly 9th and 10th graders. However, the differences in answers between the classes are not noteworthy, indicating that increased awareness does not necessarily have something to do with age in lower secondary school. Even though the

differences in answers are not that remarkable, we can assume that 8th graders need more support from teachers since they are likely to less mature and not as used to taking responsibility for their learning as older pupils are. At the same time, older pupils are expected to be more responsible for their own learning. In addition, there is no doubt that pupils prefer assessment from teachers compared to self-assessment and peer assessment according to *figure 6*, section 4.2.1.

In section 4.2.2, *table 9* shows that 65,3 % strongly agreed and 27,4 % agreed that they get support from the teacher when they ask for it, conflated to 92,7 %. This indicates that most pupils get help and guidance from their teacher when they ask for it. The second statement in *table* 6 shows that 75,8 % of the pupils strongly agree or agree that they have experienced support from the teacher without asking for help. These results show that most pupils get support and help from teachers whether they ask for it or not. These situations could also contain elements of assessment and guidance that influence pupils' desire to learn. There can be several factors that play a part in teachers' involvement without pupils asking for it, such as the relation between teacher and pupils, pupils' motivation, or the teachers' knowledge and motivation about the theme. When teachers give support to pupils, they can also be giving spontaneous assessments orally or through their body language (Bøhn, 2020, p. 268). This kind of assessment is likely to happen more often than giving a written assessment to an assignment and is expected to influence pupils' desire to learn. Pupils often think of feedback as someone else's responsibility, usually teachers, who provide feedback about how they have accomplished tasks, what goals to reach, and what they are supposed to do (Hattie & Timperley, 2007, p. 101).

We cannot say for sure that OneNote is a decisive factor in the increase of awareness. It could be that the combination of starting to use OneNote for AfL happened at the same time as the school increased the focus on "My lifelong learning". Moreover, pupils have expressed that they benefit from OneNote, making it easier to get an overview of assessments. Some of them use earlier assessments to improve their current schoolwork. The novelty of pupils taking responsibility or being involved in their own learning can be engaging and portray a picture of success. However, teachers express that writing self-assessments in all subjects before midterm was demanding and tiring for many of the pupils. Because the pupils had to write many self-assessments, it was difficult for pupils to obtain ownership of the self-assessments.

5.1.5 Increased awareness of assessment among teachers

Teachers at the school claim that they have become more consistent in giving feedback after the introduction of OneNote. They apply that it has been an increased focus on AfL at the school and that the use of OneNote has changed their assessment habits. In OneNote, teachers can see what and how other teachers give assessments. We believe that this sharpens teachers' assessment practice and can contribute to what Bøhn (2018, p. 236) refers to as a shared assessment culture. Bøhn further states that a shared assessment culture will help teachers improve their assessment reliability and validity. To improve a shared assessment culture at a school, one should make sure that the teachers have the same understanding regarding concepts and the intention of the use of feedback and assessments (Gamlem, 2022, p. 20). Watching and sharing how and what other teachers assess could make a teacher more aware of one's own assessment practice. Trying out a new approach will often contribute to discussions among the teachers and the school management about assessment before the implementation starts and evaluating the practice after a while. Discussion and evaluation can lead to changes with the desire for a better customization and improvement practice. LK20 underlines the importance of the teacher's role to give feedback that leads to learning development (NDEAT, 2019b). Bøhn (2020, p. 268) argues that teachers need to know why, how, and what to assess in different situations. Hattie and Yates (2014, pp. 65-66) mention how teachers need to adapt their feedback based on the pupils' content knowledge. This can be viewed as giving feedback that is both related to the subject content, but most importantly that teachers know their pupils' different levels of achievements and give feedback accordingly. As a result of the national focus on AfL from 2010 to 2018, assessment awareness has increased among teachers and schools in the last decade (NDEAT, 2019c). NDEAT adds that the assessment culture has also become more learning-driven, meaning it focuses more on how the pupil can learn from the assessment. In addition, Burner (2020, p. 57) claims that the focus of formative assessment in LK20 should lead to an increased assessment awareness among teachers. However, development work in school takes time.

5.1.6 Language learning

Assessment in English and other language subjects have an additional focus as the language will be assessed together with the pupil's knowledge of the content in the subject. As we analyzed self-assessment tables in OneNote, we saw that pupils assessed themselves according to content, structure, and language. All the assessments we saw in OneNote were written in Norwegian, which surprised us. From previous practice periods in schools, we as student

teachers have experienced that some schools or teachers are conscious of only speaking or writing English in class, also when it comes to giving assessments. The more the teachers and pupils use their first language in class, the more they will have change to get expose themselves to the target language (Harmer, 2015, p. 50). This could explain why many English teachers have an *English-only* policy. However, indicates that the assessment practice among English teachers is different from school to school and probably from teacher to teacher. Receiving assessments in Norwegian will probably be safer and more understandable for most pupils. At the same time, one could argue that assessment could be a part of language learning and should be given in English. Suppose the teachers only use English as the assessment language, then they must use adapted language to ensure that the pupils understand the meaning behind the feedback.

We have also experienced teachers adapting to the pupils' achievements. In those cases, teachers gave feedback in Norwegian to pupils who were achieving at a lower level or did not engage in the English subject. These practice teachers expressed that the most important aspect of assessment was that these pupils experience mastery and understand the feedback to improve in the subject. In order to succeed in language learning, the target language input is one of the most important factors (Haukås, 2018). Receiving assessments in English will challenge pupils to interpret the English input while writing self-assessments will require the pupils to produce output of the language.

5.2 Assessment

This section will discuss development among pupils, differences across the three grades, learning desire, pupils' needing support from teachers, pupil involvement, and variation of digital feedback.

5.2.1 Development is most important

The finding in section 4.2.1 shows that almost 80 % of the pupils want feedback that tells them what they have done wrong and could be corrected. Hattie and Timperley (2007) define this type of feedback as feedback about the task (FT). FT is considered the most effective as it shows pupils what is correct and incorrect in the task. The high percentage indicates that pupils want assessments that make them aware of when they make mistakes and how they can correct the errors to become better. In other words, the pupils do not have to spend much time finding

errors. The time pupils will use to improve from the assessment will depend on the teacher's feedback. Studying the answers to each class in *figure 5* in section 4.2.1, one can see that the 10th graders have the highest percentage of pupils who want feedback on the language they use. This could be a consequence of the higher pressure to perform and improve grades as they are about to apply for upper secondary school.

Another interesting finding is that 58,9 % of the pupils answer that they want to receive feedback that confirms that they are "good". We added this answer option to the question *What do you want to receive feedback about?*, because Hattie and Timperley claim this is the least effective form of formative feedback (Hattie & Timperley, 2007). This is what they call positive personal affirmation. This feedback does not focus on the task but about the self (FS). One reason could be that pupils want an explicit confirmation that they are doing what is expected of them, even at a personal level. Giving personal feedback is risk-taking by the teacher, especially if pupils experience the feedback as critique (Hattie & Yates, 2014, p. 65). Teachers need to have an assessment competence that allows them to give feedback that points out errors and the pupil's development potential without them finding the feedback unnecessary and hurtful. Taking a closer look at the percentage of each grade answering *That I am "good"*, we see that the 8th graders represent 37,5 % of the answers. 9th graders amount to 28,6 %, and 10th graders constitute 33,9 %. Compared to the percentage of pupils who answer they want feedback about what they have done wrong and can correct, a higher percentage of 8th and 10th graders want feedback telling them they are "good". The term "good" can be interpreted in different ways, where pupils understand them term differently. This is a broad option with many categories and depictions fitting the term. Ultimately, we cannot be sure pupils view and interpret the term in the same way. 9th graders, however, have a slightly lower percentage at FS compared to their answer rate at wanting to get feedback on what is wrong and can be corrected.

According to *Table 10* in section 4.2.3, most pupils use the feedback they receive from the teacher. We asked this question in both questionnaires, and there was a slight decrease in pupils who agree with the statement in the second questionnaire. Reasons for that could be that the pupils have gotten more feedback and reflected on the relevance of the feedback. It could also be coincident. However, in the first questionnaire were the pupils asked to explain why they agree or do not agree with the use of feedback. They use feedback to enhance their assignments and improve their oral and writing skills in English. The findings indicate that the pupils receive feedback that they find useful. Pupils who find the feedback useful will experience the feedback as valuable (Gamlem, 2022). Experiencing feedback that gives information that can contribute

to new or extended understanding can be valuable for the pupil's investment to further effort. The pupils could write in "My lifelong learning" what they experience as useful feedback in relation to this. This could also help the teacher adapt AfL for each pupil.

Teachers in Norway find it most important to give assessments that give pupils information about how they can develop themselves, mainly 10th-grade teachers (Rambøll Management Consulting, 2020, p. 19). The fact that AfL is most valued by both pupils and teachers shows that it is an assessment method that both parties are pleased with. Hattie and Yates (2014, p. 64) state that by asking pupils why feedback is important to them, most pupils would answer that they get to know what they can improve until next time. We asked a similar question, W*hat do you think is most important about the assessment you receive?* in questionnaire 1, see *figure 7* in section 4.2.2. The results show that 81,1 % of the pupils answered *I get to know how I can develop further* which is in line with Hattie and Yates's statement. This answer has the same essence as our first finding in this paragraph. We allowed the pupils to choose several answer options to this question as we thought it would be hard to choose one and that the opportunity to give several answers would give a clearer picture of what they value with assessment. The second most answered option is *I get to know my academic level* with 61,1 %, and 56,8 % answered that *I experience mastery in what I have done*. These three answers show that pupils value assessments that give them information about how they can become better, tell them where they are academically, and that they want to experience mastery. Less than 40 % claim that they get a better understanding by receiving an assessment, which indicates that for some pupils, it is important to receive an assessment that makes them understand, perhaps as an acknowledgment that they have done their work correctly.

5.2.2 Differences across grades

10th graders know what kind of feedback they want and which type of feedback is useful for them compared to 8th and 9th graders. *Figure 8* in section 4.2.2 shows that almost half of the pupils who answer that the most important part of feedback is getting to know their academic level are 10th graders. This shows a tendency of older pupils wanting feedback to say something about their academic level. There could be many reasons as to why that is. We can assume that it could be because it has to do with the grade requirements to get accepted into upper secondary school. This is because the most sought-after field of studies having the most applicants, leading to the pupils with the highest-grade average being first in line. 10th graders represent over half the pupils who answer that they want teachers to tell them they have used previously received

feedback in *Figure 4*, section 4.2.1. *Figure 3* in the same section shows that 45,5 % of pupils wanting feedback about how they solved a task are 10th graders. Further, 10th graders are also most represented in wanting feedback about the content they have written, with 39,6 %. *Figure 5*, also in section, shows that 44,8 % of pupils who want feedback about their language are 10th graders. We can assume that another reason older pupils have more apparent preferences could have something to do with their maturity, ability of metacognition, that they are more reflected about their level of achievement, and that they have become more aware of the social comparison. As Imsen (2020, pp. 497-498) argues, these arguments require pupils to be independent. The social comparison arises when the pupils lack objective criteria to assess them against, as Skaalvik and Skaalvik (2015) indicate. The pitfalls of social comparison can lead to pupils caring less about completing tasks, especially impacting struggling pupils (Skaalvik & Skaalvik, 2015, p. 35). This underlines the importance of assessing pupils based on objective criteria while limiting pupils' need to share their grades or level of achievements with other pupils.

We find it surprising that 8th graders do not want to know their academic level to a greater extent than they do. It is common to think that because 8th graders start receiving grades in lower secondary school that they are both excited and intrigued about receiving grades. This is not the case among the respondents of this study. It has been common to hand out grades to all assessments. The school we did our research on gives assessments in the form of comments and a level of competence instead of a grade. This could be a factor as to why the focus among younger pupils is not as high compared to older pupils.

5.2.3 Learning desire is less important

The desire to learn from feedback does not seem important for pupils at the lower-secondary school. Section 4.2.2 shows that 18,9 % of the pupils answer that the most important with assessment is to experience a desire to learn. Divided into grades, *figure 9* shows the highest percentage rate was 38,9 % by 8th graders, while 10th graders had the lowest percentage with 27,8 %. Teachers of 10th-grade pupils also seem not to value the desire to learn to a large degree as they score four percent lower than the average when they were asked to choose the three aims they important with continuous assessment (Rambøll Management Consulting, 2020, p. 19). 4th-grade teachers, however, were 13 % above the average. This indicates two things. First, it indicates that learning desire is not considered that important within assessment work, neither for teachers nor pupils. Secondly, the desire to learn seems to become less important in 10th

grade among pupils and teachers. One reason for that could be because they want assessments that give information about their academic level and that the learning desire becomes less important as grades become more important. In contrast, pupils in 8th grade and 4th-grade teachers seem to value the desire to learn to a greater extent. In addition, the questionnaire was carried out before the pupils in 8th grade had received their first grades. Therefore, we can assume that they were most familiar with assessments without grades and their experience of assessments from primary school was fresh in memory. Another fact is that LK06 nor the general section of the curriculum did not mention the desire to learn (NDEAT, 2013, 2015). The core curriculum and LK20 state that schools shall facilitate learning that stimulates learning desire (NDEAT, 2017, 2019b). This indicates that it has been a change of focus regarding the desire to learn between the curriculums.

Another interesting finding in relation to *figure 7* in section 4.2.2 is that 37,9 % of the pupils answer *I get a better understanding of my own learning*, compared to 81,1 % who answer *I get to know how I can develop further*. The two answers have similarities but can be interpreted that it is more important to get to know how to develop without having to understand or reflect on why. The school is supposed to increase pupils' competence. According to the core curriculum, the ability to think critically, reflect, and understand is included in the term competence (NDEAT, 2017). Teachers shall give formative assessments that increase the pupil's knowledge and competence. However, perhaps teachers need to use the time to explain or challenge their pupils to understand their feedback. Pupils are more likely to feel control of their own learning when they understand what to do and why (Brookhart, 2008). This is what Brookhart refers to as a motivational factor within powerful feedback. Feedback that makes the pupils understand where they are in the learning process and what to do next is a cognitive factor.

5.2.4 Variation of digital feedback

With the help of digital tools, teachers can vary how they give pupils feedback. Digital tools, such as OneNote, allow teachers to use various forms of feedback and can facilitate a diverse use of assessment among teachers. OneNote has different features and functions teachers can use to assess pupils' work. The program is continuously changing and evolving. These changes normally add or remove features in OneNote. These features include adding voice notes, recording videos of themselves, and screen recordings. Voice notes typically give more detailed feedback about pupils' tasks (FitzPatrick & McKeown, 2020). Voice notes can also reduce the

time spent assessing pupils' work while making it easier for the pupils to understand the meaning of the feedback because oral feedback tends to be more direct (Bilbro et al., 2013). Teachers recording themselves can add to the voice notes, since pupils can see reactions and facial expressions of the teacher assessing their work. If teachers also add a screen recording of their computer screen while assessing, pupils can view the specific part of the pupils' work the teacher is assessing. This could positively impact struggling pupils who find written feedback challenging to understand (Lamey, 2015). This, to our knowledge, is not a practice among teachers at the school. Teachers could either experiment with the features themselves or have a joint walkthrough of the features, which could help with the common understanding among the staff. This could be done by having a teacher that has competence about OneNote's features and is willing to instruct other teachers. A more compelling argument for introducing these features to teachers is for the management to see the value of these assessment forms.

Findings in section 4.1.1 show that some teachers at the school are using videos from social platforms that refer to common grammatical errors among pupils. There could be many reasons why using social platforms in assessment is beneficial. Pupils could get inspiration about how to find alternative places on the internet that present commonly misused language errors. Social platforms such as TikTok and YouTube let the user follow content creators. If teachers find creators that base their content around language errors, pupils can follow these creators to receive future videos from them. The teachers must be critical of the videos they recommend to the pupils. Partly because of the way these language errors are presented, but mainly because of the possibility of spreading misinformation. Teachers and pupils need to be critical of the sources since videos can contain false elements. Giving the pupils tools and examples of how to approach language learning and where to find this information can lead to pupils obtaining knowledge about learning to learn. This can include the ambition by NDEAT to develop the ability of lifelong learning by having a broad approach to language learning (NDEAT, 2017).

Gamlem and Smith (2013) mention that pupils in Norway have two understandings of the assessment practice in school. The first one considers that they experience that feedback is not given enough time to process at school and that feedback are not prioritized. This is how we understand the earlier practice at the school we did our research at. The second understanding Gamlem & Smith mention, also what we believe is the school's intention, is that feedback is prioritized and followed up by the teacher. Most pupils' state in *table 11*, section 4.2.3, that they agree that teachers give them feedback in a reasonable amount of time. However, the reasonable time is up for interpretation. There is reason to believe that giving feedback in

OneNote would be less time consuming for teachers considering that every pupil's assignments are gathered. The integration of Word documents in OneNote is somewhat limiting. The issue is related to editing documents added to OneNote. The difficulties arise when teachers comment on a document that pupils have added to the desired place in OneNote. Teachers first have to download the document to their computer before they can read and edit the file. We observed that this is the practice at the school. This complicated process could be integrated to a higher degree by giving teachers the ability to read and edit Word documents inside the OneNote application. This would remove the inconvenience of first downloading the document to the teacher's computer to read and comment on it before uploading the revised version back to OneNote. There is a workaround where teachers and pupils can add a Word document as a file that is uploaded to OneDrive inside OneNote. This workaround shortens the assessment process since teachers can edit the original document without having to download and upload it to OneNote. Moreover, the process can reduce the time spent assessing pupils' work.

5.3 Other findings

There are weaknesses regarding the validity of the study also. As we analyzed the data material, we discovered several factors that could influence the outcoming. First, we discovered a clear difference among the answers between the first questionnaire and second. This comes clearly to light in *figure 11*, section 4.2.5 regarding the answer options *agree* and *strongly agree*, where the percentage of *agree* and *strongly agree* switch between the first and second questionnaire. This indicates that many pupils have changed their opinion or that it could be difficult to understand the differences between these options. Secondly, we found it difficult to interpret if pupils used their own reflections in the self-assessment or if they rewrote the teacher's feedback. Thirdly, the implementation of the focus on lifelong learning is still an initial phase at the school and as we can see it they have not found a common understanding of how the notebook "My lifelong learning" should be. In addition, our data collection period lasted four months, and not over years where we could have seen a greater development.

6 Conclusion

In this section, the conclusion of this research, and further research will be presented. This thesis aims to answer the following research question:

> How can assessment for learning contribute to lifelong learning with the use of digital tools in the English subject at lower secondary school?

Our findings indicate that both pupils are predominantly satisfied with using OneNote for lifelong learning, which teachers also advocate. Pupils find it easier to look up previously received feedback in OneNote. Further, pupils express that they use the feedback they receive when starting new tasks. The lower secondary school's focus on AfL and "My lifelong learning" has given pupils a more prominent role in various assessment situations. The attention to AfL has also established pupils to self-assess themselves more frequently. Self-assessments are carried out using the self-assessment table each time pupils evaluate themselves. This leads to predictability, with pupils knowing what to evaluate themselves after. However, this table is constant and generic, prompting similar reflections among most pupils. Our findings further show that pupils rely on feedback from their teachers. Most pupils prefer receiving feedback from teachers rather than assessing themselves or being assessed by other pupils. Teachers' assessments often define how pupils' self-assessments are written, with many pupils being heavily inspired by teachers' feedback. Our findings also show that pupils who were given questions to answer before their midterm assessments reflected less than pupils who did not receive instruction before writing their midterm assessments. Still, pupils have become more conscious and aware of their own learning through the focus on "My lifelong learning" using AfL. In addition, the feedback teachers' give also helps pupils to get a better understanding of their own learning. Furthermore, our findings indicate that the implementation of OneNote is still in the initial phase. The assessment practice among teachers varies, leading to different assessment practices regarding "My lifelong learning" in OneNote. Whether the focus on "My lifelong learning" in OneNote has led to a better assessment practice among pupils is difficult to suggest. At the same time the school introduced "My lifelong learning", the assessment practice among teachers also shifted since they started using OneNote actively to assess pupils' work. Therefore, the increased focus on pupils' and teachers' assessment practice can be related to each other, indicating that changing a school's assessment practice could require collaboration between the practitioners.

Further, the school has had an increased amount of focus on AfL and related AfL to lifelong learning. This approach was assisted through the use of digital tools. This was supported by the English curriculum (NDEAT, 2019b), as well as the *observations on the national assessment learning program* by the Norwegian Directorate for Education and Training (2019c). One of the points from the *national learning program* was to further develop pupils' involvement in relation to their learning. The school's focus on AfL has led to pupils having to be more involved in AfL through their self-assessments. However, adapting the questions in the self-assessment table could lead to more reflections and awareness among the diversity of pupils.

6.1 Further research

This thesis has explored AfL through the use of digital tools in the English subject at lower secondary school. The literary research showed limited research about AfL using digital tools. Future research can look deeper into how to involve pupils in the AfL process. Further, the use of digital tools in assessment and other digital tools that can be used in assessment would supplement the field of AfL. Based on our reflections on implementing the self-assessment table, we suggest research exploring adapting the questions to different themes in a subject and the varying level of achievement among pupils would contribute to the field. Our research focused on the implementation of AfL at lower secondary school throughout one school year but did not focus on the effect this can have over a more extended period of time. Finally, we believe that research on whether the focus on AfL leads to pupils taking more responsibility in their own learning would contribute positively to the field of AfL.

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Appendix 1 – NSD Approval

Vurdering

Referansenummer
958039

Prosjekttittel
Masteroppgave

Behandlingsansvarlig institusjon
UiT Norges Arktiske Universitet / Fakultet for humaniora, samfunnsvitenskap og lærerutdanning / Institutt for lærerutdanning og pedagogikk

Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)
Tove Elinor Holmbukt, tove.holmbukt@uit.no, tlf: 77660764

Type prosjekt
Studentprosjekt, masterstudium

Kontaktinformasjon, student
Birgitte Robertsen, bro037@uit.no, tlf: 46800810

Prosjektperiode
12.11.2021 - 16.05.2022

Vurdering (1)

25.02.2022 - 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 25.02.2022 med vedlegg. Behandlingen kan starte.

TYPE OPPLYSNINGER OG VARIGHET
Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 16.05.2022.

LOVLIG GRUNNLAG FOR UTVALG 1
Prosjektet vil innhente samtykke fra foresatte til behandlingen av personopplysninger om barna. 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/foresatte kan trekke tilbake.

Lovlig grunnlag for behandlingen vil dermed være foresattes 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 foresatte 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 viderebehandles til nye uforenlige formål
• 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 lenger enn nødvendig for å oppfylle formålet

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

Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18) og dataportabilitet (art. 20).

Vi minner om at hvis en registrert/foresatt tar kontakt om sine/barnets 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 sikkerhet (art. 32).

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

MELD VESENTLIGE ENDRINGER
Dersom det skjer vesentlige endringer i behandlingen av personopplysninger, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. Før du melder inn en endring, oppfordrer vi deg til å lese om hvilke type endringer det er nødvendig å melde:
https://www.nsd.no/personverntjenester/fylle-ut-meldeskjema-for-personopplysninger/melde-endringer-i-meldeskjema. Du må vente på svar fra NSD før endringen gjennomføres.

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

Kontaktperson hos NSD: Olav Rosness, rådgiver.

Lykke til med prosjektet!

Appendix 2 – Consent form

Deltakelse i forskningsprosjektet

«Vurdering for læring ved bruk av OneNote-klassenotatblokk»

Dette er et spørsmål til deg som foresatt om deltakelse i et forskningsprosjekt hvor formålet er å finne ut hvordan elever og engelsklærere bruker OneNote-klassenotatblokk i vurderingssammenhenger i engelskfaget. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for eleven. Vi sender deg dette på bakgrunn av at vi ønsker å bruke elevens innhold (egenvurdering gjort av eleven og tilbakemeldinger fra lærer) i OneNote i vårt forskningsprosjekt. For å kunne gjøre dette må vi ha samtykke fra deg som foresatt siden vi kan se elevens navn i OneNote. Vi vil ikke sitere eleven direkte eller nevne navn og kjønn, men ønsker å samle informasjon om klassen som helhet. Det vil si at deltakelsen til eleven er anonymisert og kan ikke spores tilbake til eleven. Dette gjør vi for å få en samlet vurderingsforståelse av klassen, ikke enkeltelever. To baser på skolen er med på prosjektet vårt. Prosjektet vårt er godkjent av Norsk senter for forskningsdata (NSD).

Formål

Dette er en masteroppgave innenfor lærerutdanningen ved UiT Norges arktiske universitet. Formålet med oppgaven er å få vite hvordan programmet OneNote kan brukes til vurdering for læring i engelskfaget.

Problemstilling:

Hvordan kan vurdering for læring fremmes gjennom bruk av OneNote-klassenotatblokk i ungdomsskolen?

I dette forskningsprosjektet vil det også bli gjennomført spørreundersøkelser og observasjoner i klasserommet. Data og opplysninger vi får gjennom disse er anonyme slik at de ikke kan spores tilbake til elevene. Dette er ikke en del av forskningen vi trenger samtykke til, men vi ønsker å opplyse deg om at dette er en del av prosjektet vårt.

Hvem er ansvarlig for forskningsprosjektet?

UiT Norges arktiske universitet er ansvarlig for prosjektet.

Hvorfor får du spørsmål om deltakelse?

Du får spørsmål om deltakelse på grunn av at en av engelsklærerne på skolen er med på et forskningsprosjekt ved UiT som skal se på hvordan man kan øke samarbeidet mellom universitetet, praksisskoler og studenter. Dette gjør at alle foresatte til elevene i de to basene får spørsmål om å delta i prosjektet vårt.
Hva innebærer det for eleven å delta?

- Vi får innsyn i elevens arbeid i OneNote der vi kan se på tilbakemeldinger eleven har fått fra engelsklærerne sine samt egenvurderinger eleven selv har gjort i engelskfaget.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du samtykker til deltakelse, kan du som foresatt og elev når som helst trekke samtykket tilbake uten å oppgi noen grunn. Ved å trekke samtykket fjerner elevens egenvurdering og tilbakemeldinger fra prosjektet vårt. Det vil ikke ha noen negative konsekvenser for eleven hvis du/dere ikke vil delta eller senere velger å trekke samtykket.

Deres personvern – hvordan vi oppbevarer og bruker deres opplysninger

Vi vil bare bruke opplysningene om eleven til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.
Det er kun vi studenter som vil ha tilgang til elevens relevante data til forskningsprosjektet vårt. Dette sikres gjennom bruk av totrinnsverifisering for tilgang til datasystemet for lagring av data. Skulle det være av interesse for veileder å se på våre data skjer dette via våre systemer etter anonymisering.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Opplysningene vi henter passer vi på å anonymisere. Når prosjektet avsluttes 16. mai 2022 vil vi ikke lengre ha tilgang til skolesystemet. Det vil si at vi ikke lengere har tilgang til OneNote og annen informasjon vi kan hente fra skolens systemer.

Hva gir oss rett til å behandle personopplysninger om eleven?

Vi behandler opplysninger om eleven basert på ditt samtykke.
På oppdrag fra UiT Norges arktiske universitet har personverntjenester vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:
- innsyn i hvilke opplysninger vi behandler om eleven, og å få utlevert en kopi av opplysningene
- å få rettet opplysninger om eleven som er feil eller misvisende
- å få slettet personopplysninger om eleven
- å sende klage til Datatilsynet om behandlingen av elevens personopplysninger

Hvis du har spørsmål til studien, eller ønsker å vite mer om eller benytte deg av dine rettigheter, ta kontakt med:
- Birgitte Robertsen (bro037@uit.no) / Odd-Arild Knustad (okn009@uit.no)
- UiT Norges arktiske universitet ved Tove Elinor Holmbukt (tove.holmbukt@uit.no)
- Vårt personvernombud Joakim Bakkevold (77 64 63 22)

Hvis du har spørsmål knyttet til Personverntjenester sin vurdering av prosjektet, kan du ta kontakt med:
- Personverntjenester på epost (personverntjenester@sikt.no) eller på telefon 53 21 15 00

Med vennlig hilsen
Tove Elinor Holmbukt   Birgitte Robertsen/Odd-Arild Knustad
(Veileder)   (Studenter)

Jeg har mottatt og forstått informasjon om prosjektet *Vurdering for læring ved bruk av OneNote-klassenotatblokk* og har fått anledning til å stille spørsmål. Jeg samtykker til:

☐ at studentene får innsyn og kan behandle opplysninger i elevens område i OneNote
☐ at studentene kan hente opplysninger om hvilken klasse eleven går i

----
(Navn på elev)

(Signert av foresatt, dato)

Appendix 3 – Pupils' first questionnaire

Students - Questionnaire 1

Obligatoriske felter er merket med stjerne *

Tilbakemeldinger i dette spørreskjemaet gjelder alle faglige tilbakemeldinger du får fra lærerne dine i engelskfaget. Tilbakemeldinger inneholder informasjon om hva du gjør bra og hva som kan forbedres i ditt skolearbeid. Tilbakemeldinger kan være muntlige eller skriftlige.

Å svare på spørreundersøkelsen vil ta ca. 10 minutter.

Les spørsmålene nøye og vær ærlig!

Hvilken klasse går du i?

- ◯ 8. klasse
- ◯ 9. klasse
- ◯ 10. klasse

Læreren gir meg støtte og hjelp i engelskfaget når jeg ber om det/gir signal om det

- ◯ Helt enig
- ◯ Litt enig
- ◯ Vet ikke
- ◯ Litt uenig
- ◯ Helt uenig

Læreren forteller hva jeg bør gjøre for at jeg kan bli bedre i engelskfaget uten at jeg må spørre om det

- ◯ Helt enig
- ◯ Litt enig
- ◯ Vet ikke
- ◯ Litt uenig
- ◯ Helt uenig

Læreren gir meg tilbakemelding på skriftlige innleveringer i rimelig tid etter innleveringen

○ Helt enig

○ Litt enig

○ Vet ikke

○ Litt uenig

○ Helt uenig

Læreren forteller hva som er bra med arbeidet jeg gjør

○ Helt enig

○ Litt enig

○ Vet ikke

○ Litt uenig

○ Helt uenig

Læreren forklarer hva vi blir vurdert etter i forkant av en skriftlig innlevering eller muntlig presentasjon

○ Helt enig

○ Litt enig

○ Vet ikke

○ Litt uenig

○ Helt uenig

Obligatoriske felter er merket med stjerne *

Hvor ofte får du tilbakemeldinger fra engelsklæreren din?

- ○ Flere ganger i uken
- ○ 1 gang i uken
- ○ 1-3 ganger i måneden
- ○ 2-4 ganger i halvåret
- ○ Sjeldnere

Hvor ofte forteller læreren din hva du skal gjøre for å bli bedre i engelsk?

- ○ Flere ganger i uken
- ○ 1 gang i uken
- ○ 1-3 ganger i måneden
- ○ 2-4 ganger i halvåret
- ○ Sjeldnere

Hvor ofte ber læreren deg om å vurdere ditt eget arbeid i engelskfaget?

- ○ Flere ganger i uken
- ○ 1 gang i uken
- ○ 1-3 ganger i måneden
- ○ 2-4 ganger i halvåret
- ○ Sjeldnere

Obligatoriske felter er merket med stjerne *

Jeg bruker tilbakemeldingene jeg får fra læreren min til å forbedre engelsktekstene mine

○ Helt enig

○ Litt enig

○ Vet ikke

○ Litt uenig

○ Helt uenig

Jeg får være med på å bestemme hva det skal legges vekt på når arbeidet mitt vurderes

○ Helt enig

○ Litt enig

○ Vet ikke

○ Litt uenig

○ Helt uenig

Jeg forstår tilbakemeldingene jeg får fra læreren min

○ Helt enig

○ Litt enig

○ Vet ikke

○ Litt uenig

○ Helt uenig

Obligatoriske felter er merket med stjerne *

Hvilken type vurdering synes du passer best for deg? (Du kan krysse av flere svaralternativer)

☐ Tilbakemelding fra lærer

☐ Egenvurdering

☐ Hverandrevurdering

☐ Annet

Beskriv så godt du kan hvilken type vurdering som passer best for deg

ⓘ Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilken type vurdering synes du passer best for deg? (Du kan krysse av flere svaralternativer)»

Jeg får bruk for tilbakemeldingene jeg får fra læreren min

○ Helt enig

○ Litt enig

○ Litt uenig

○ Helt uenig

Jeg får bruk for tilbakemeldingene mine fordi…

> ℹ️ Dette elementet vises kun dersom alternativet «Litt enig» eller «Helt enig» er valgt i spørsmålet «Jeg får bruk for tilbakemeldingene jeg får fra læreren min»

Jeg får IKKE bruk for tilbakemeldingene mine fordi…

> ℹ️ Dette elementet vises kun dersom alternativet «Helt uenig» eller «Litt uenig» er valgt i spørsmålet «Jeg får bruk for tilbakemeldingene jeg får fra læreren min»

Obligatoriske felter er merket med stjerne *

Hva liker du å få tilbakemelding om? (Du kan krysse av flere svaralternativer)

☐ Språket jeg bruker

☐ Ting jeg har gjort feil og kan endre på

☐ At jeg er flink

☐ Hvordan jeg løste en oppgave

☐ Innholdet i det jeg har skrevet

☐ At jeg har brukt tilbakemeldinger jeg har fått tidligere

☐ Annet

Beskriv så godt du kan hva du liker å få tilbakemelding om *

> ℹ️ Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hva liker du å få tilbakemelding om? (Du kan krysse av flere svaralternativer)»

Hva mener du er viktigst med vurderingen du får? (Du kan krysse av flere svaralternativer)

- ☐ Jeg får vite hvordan jeg kan utvikle meg videre
- ☐ Jeg opplever mestring i det jeg har gjort
- ☐ Jeg får en bedre forståelse for egen læring
- ☐ Jeg får vite mitt faglige nivå
- ☐ Jeg får vist hva jeg kan på ulike måter
- ☐ Jeg opplever lærelyst
- ☐ Annet

Beskriv så godt du kan hva du mener er viktigst med vurderingen du får

ℹ Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hva mener du er viktigst med vurderingen du får? (Du kan krysse av flere svaralternativer)»

Hvordan synes du det er å få vurderinger i OneNote i engelsk?

Forklar så godt du kan hvorfor du liker eller ikke liker å få vurderinger i OneNote

Tusen takk for din deltakelse!

Appendix 4 – Pupils' second questionnaire

Students - Questionnaire 2

I denne spørreundersøkelsen blir du spurt om **vurdering**, **tilbakemeldinger** og **veien videre** i engelskfaget.

Spørreundersøkelsen vil ta **ca. 5 minutter** å gjennomføre.

Les spørsmålene nøye og vær ærlig!

Hvilken klasse går du i?

- ○ 8. klasse
- ○ 9. klasse
- ○ 10. klasse

Læreren forklarer hva vi blir vurdert etter i forkant av en skriftlig innlevering eller muntlig presentasjon

- ○ Helt enig
- ○ Litt enig
- ○ Vet ikke
- ○ Litt uenig
- ○ Helt uenig

Jeg får være med på å bestemme hva det skal legges vekt på når arbeidet mitt vurderes

- ○ Helt enig
- ○ Litt enig
- ○ Vet ikke
- ○ Litt uenig
- ○ Helt uenig

Jeg forstår tilbakemeldingene jeg får fra læreren min

- ○ Helt enig
- ○ Litt enig
- ○ Vet ikke
- ○ Litt uenig
- ○ Helt uenig

Jeg får bruk for tilbakemeldingene jeg får fra læreren min

- ○ Helt enig
- ○ Litt enig
- ○ Vet ikke
- ○ Litt uenig
- ○ Helt uenig

Hvilke(n) type(r) vurdering syns du passer for deg? (Du kan krysse av flere svaralternativer)

☐ Tilbakemelding fra lærer

☐ Egenvurdering

☐ Hverandrevurdering

☐ Annet

Beskriv så godt du kan hvilken type vurdering som passer best for deg

ⓘ Dette elementet vises kun dersom alternativet «Annet» er valgt i spørsmålet «Hvilke(n) type(r) vurdering syns du passer for deg? (Du kan krysse av flere svaralternativer)»

Jeg har blitt bevisst på mine styrker og svakheter i engelskfaget gjennom tilbakemeldinger fra lærer i OneNote

○ Helt enig

○ Litt enig

○ Vet ikke

○ Litt uenig

○ Helt uenig

Jeg har blitt bevisst på mine styrker og svakheter i engelskfaget gjennom å skrive egenvurderinger i OneNote

○ Helt enig

○ Litt enig

○ Vet ikke

○ Litt uenig

○ Helt uenig

Basert på egne erfaringer, eget arbeid og tilbakemeldinger du har fått	Min kommentar
-Hva lykkes du med/har fått til?	
-Hva ønsker du å få til videre i engelskfaget?	
-Hvordan kan du få det til?	

Jeg vet hva jeg vil få til videre i engelskfaget

- ○ Alltid
- ○ Ofte
- ○ Noen ganger
- ○ Sjelden
- ○ Aldri

Basert på egne erfaringer, eget arbeid og tilbakemeldinger du har fått	Min kommentar
-Hva lykkes du med/har fått til?	
-Hva ønsker du å få til videre i engelskfaget?	
-Hvordan kan du få det til?	

Jeg vet hvordan jeg kan få det til

- ○ Alltid
- ○ Ofte
- ○ Noen ganger
- ○ Sjelden
- ○ Aldri

Tusen takk for din deltakelse!

Appendix 5 – Teachers' questionnaire

Endre tittel

Steng

Teachers - Questionnaire

Et gjennomgående tema gjennom hele spørreundersøkelsen (5 spørsmål) er

- vurderingsarbeid du som lærer og elevene gjør (tilbakemelding og egenvurdering),
- **arbeid i** "Min livslange læring"**- mappa i OneNote,**
- halvårsvurdering **og eventuelle forskjeller** i vurderingsarbeidet nå og før innføringen av OneNote.

Hva er dine erfaringer av å bruke OneNote som et verktøy i vurderingsarbeid?

Hvordan mener du vurdering i OneNote har fungert så langt for elevene?

Hvordan har arbeidet med halvårsvurderingen i engelsk fungert etter at elevene fikk en større rolle i prosessen?

Hvordan mener du tidsbruken din på vurdering er etter innføringen av OneNote?

- ○ Jeg bruker mer tid
- ○ Jeg bruker omtrent like mye tid
- ○ Jeg bruker mindre tid

Hvorfor mener du at du bruker mer tid på vurderingsarbeid?

Hvorfor mener du at du ikke bruker med tid på vurderingsarbeid?

Er det noe du vil tilføye om tidsbruken av vurdering i OneNote?

Er det noe du synes vi ikke har spurt om som du ønsker å tilføye angående vurdering i OneNote?

Tusen takk for din deltakelse!

Appendix 6 – Self-assessment table

Before:

Basert på egne erfaringer, eget arbeid og tilbakemeldinger du har fått i faget i høst,	Min kommentar
-Hvilken skryt vil du gi deg selv? Hva lykkes du med? 👍	
-Hva skal du jobbe videre med fremover i faget? 🤓	

After:

Basert på egne erfaringer, eget arbeid og tilbakemeldinger du har fått	Min kommentar
-Hva lykkes du med/har fått til?	
-Hva ønsker du å få til videre i engelskfaget?	
-Hvordan kan du få det til?	

Appendix 7 – Layout of OneNote Class Notebook

Appendix 8 – Layout of "My lifelong learning"

OneNote

Hjem   Sett inn   Tegne   Visning

Calibri   20

Klipp ut
Kopier
Lim inn   Format

F K U ab x₂

Overskrift 1
Overskrift 2

Gjøremål
Viktig

Del

Min livslange læring -

Velkommen
> _Bare for lærere
> _Innholdsbiblio...
> _Samarbeidso...
∨
    Matematikk
    Norsk
    Engelsk
    KRØ
    Samfunnsfag
    Naturfag
    KRLE
    Mat og helse
    Kunst og hån...
    Musikk
    Språk - fordy...
    Utviklingssa...
    Halvårsvureri...
    Livet etter La...
    Sosial kompe...

∨
    Halvårsvurdering i fag

Halvårsvurdering i fag

torsdag 2. september 2021   14:34

I hvert fag skriver du en egenvurdering av dette halvåret ved å svare på disse spørsmålene:
- Hva ønsker du å få til videre i faget?
- Hvordan kan du får det til?

Fag	Egenvurdering	Lest av faglærer
Matematikk		
Norsk		
Engelsk		
KRØ		
Samfunnsfag		
Naturfag		
KRLE		

Legg til inndeling   Legg til side