# Old dogs teaching new tricks?

How upper secondary English teachers in Hordaland define digital competence and what kind of digital competence is promoted in their teaching.



Benedikte Kjerrgård Hennø

Master's Thesis

Department of Foreign Languages

University of Bergen

May 2016

#### Acknowledgements

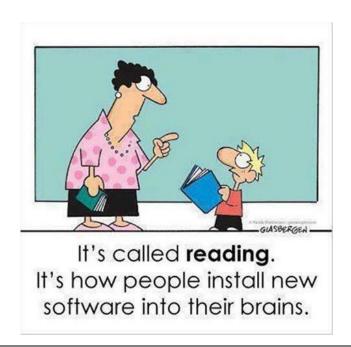
First and foremost, I would like to thank the English teachers in Hordaland County who took the time to fill in my questionnaire and by doing so gave the author of this thesis as well as the readers of it insight into their views, beliefs and praxis.

I would also like to thank my supervisor, Aud Solbjørg Skulstad, who has been very supportive during this long process, and this support as well as her advice and encouragement have been appreciated.

I am also grateful for the endless amount of practical help and encouragement from family, friends and colleagues during the writing of this thesis. I would especially like to thank my parents, Wenche and Roald Hennø, and my daughter, Ida Marie Hennø, for their support and enduring patience.

My former student, former colleague and current neighbour Lene Fjeldsbø should also be mentioned here. I am very grateful for her taking proof-reading contributions as well as her advice, support and encouragement.

Roy Eide, former e-Pedagog in Hordaland, should also be thanked here for explaining the layout of the organisation as well as providing technical assistance.



Cartoon © Randy Glasbergen, used with special permission from www.glasbergen.com

#### **Abstract in Norwegian**

Som en konsekvens av digitaliseringen av samfunnet, er nå digitale ferdigheter en av fem grunnleggende ferdigheter i alle fag i grunnskolen og i videregående skole. Denne masteravhandlingen søker å avdekke hvordan lærerne forstår begrepet digital kompetanse og hva slags digital kompetanse de forsøker å fremme i timene.

Materialet for studien ble samlet inn via en spørreundersøkelse på itslearning. Deltakerne var engelsklærere i Hordaland som hadde undervist VG1 SF og/eller VG1/VG2 YF de to siste årene før undersøkelsen. Deltakerne ble bedt om å liste de grunnleggende ferdighetene, definere begrepet digital kompetanse og beskrive ett av sine tidligere brukte undervisningsopplegg. Opplegget skulle være for en dobbeltime i engelsk der de mente digital kompetanse var blitt fremmet. I analysen ble det undersøkt hvordan lærerne oppfatter begrepet digital kompetanse samt hvilke typer digital kompetanse som ble vedlagt i planene.

Materialet ble sammenlignet med kravene til digital kompetanse som er og har blitt stilt fra lokale og nasjonale opplæringsmyndigheter og de prioriteringene disse myndighetene har foretatt. For å få en oversikt over opplæringsmyndighetens krav og prioriteringer ble bl.a. læreplanene etter Kunnskapsløftet, eksamensoppgaver de siste tre årene, rammeverk for grunnleggende ferdigheter og styringsdokument for det pedagogiske utviklingsarbeidet i Hordaland gjennomgått. Kravene som stilles til lærerne i en del av denne dokumentasjonen ikke bare noe lærerne skal være kjent med, men er og har vært krav de er pålagt å følge. Måten digitale utfordringer i skolen er blitt omtalt på i media er også tatt med. Grunnen er at dette kan ha hatt innvirkning på lærernes holdning til og motivasjon for å ta i bruk digitale hjelpemidler i undervisningen. Bruken av sosiale medier er omtalt spesielt.

34 undervisningsopplegg og 37 definisjoner ble samlet inn og analysert. Ca. 10 prosent av lærere husket ikke å nevne digital kompetanse som en del av grunnleggende ferdigheter. Disse hevdet dog senere å ta denne kompetansen med når de planla undervisning. De foreslåtte definisjonene ble utfordrende å analysere, ettersom de variert sterkt i lengde, form og innhold. Det var et tydelig fokus på bruk av pc og internett til å skrive skolearbeid og til å søke etter informasjon. Svært mange av planene dreide seg om undervisningsopplegg som skulle resultere i en muntlig presentasjon. PowerPoint var det hjelpemiddelet lærerne oftest oppfordret elevene til å bruke eller krevde at de brukte. Der var også et sterkt fokus på å trene elevene i å søke etter pålitelige kilder, evaluere kilder og oppgi kilder korrekt, samt bruk av sitat.

I de fleste undervisningsoppleggene skulle elevene jobbe individuelt på en pc, og bare unntaksvis ble elevene bedt om å samarbeide om å produsere en PowerPoint, et manus eller en tekst. Dessverre kom det ikke fram hvordan dette samarbeidet foregikk og om det ble benyttet digitale hjelpemidler som kunne fremme ytterligere digital kompetanse hos elevene. Der var ingen opplegg som tydelig tok i bruk sosiale medier og bruk av samskrivingsverktøy ble ikke nevnt.

### **Table of contents**

Acknowledgements	2
Abstract in Norwegian	
List of figures:	9
List of tables:	10
List of appendices:	11
List of abbreviations:	12
Chapter 1: Introduction	13
1.1 Why this topic	13
1.2 A classroom revolution: Digital competence becoming a basic skill	13
1.3 Analysis of a textbook	17
1.4 Hypotheses	19
1.5 Previous research	20
1.6 The aim of the thesis	20
1.7 The structure of the thesis	21
Chapter 2: Background	22
2.1 Introduction	22
2.2 K06 and the introduction of basic skills	22
2.3 The English Curriculum	24
2.3.1 The 2006 version of the English curriculum	24
2.3.2 The 2010 version of the English curriculum	24
2.3.3 The Framework	26
2.3.4 The 2013 version of the English curriculum	27
2.3.5 Exams	28
2.4 Digital Competence: The choice of term	31
2.5 The revolution: Online in the classroom	32
2.5.1 The lovers	33
2.5.2 The haters	34
2.5.3 The authorities' view on teachers, students and social media	37
2.5.4 Local authorities and social media	38
2.5.5 New tools in Hordaland County 2015/2016	39

2.6 Hordaland County and the digital revolution	40
2.6.1 The lay out of the organisation	40
2.6.2 Learning in Hordaland (Læring i Hordaland)	42
2.6.3 Mapping and monitoring digital competence	43
2.6.4 Students' digital competence according to the county	45
2.6.5 Dei Gode Døma/The Good Examples	45
2.6.6 The Steering Document	46
Chapter 3: Methods and Material	47
3.1 Introduction	47
3.2 Methods	47
3.2.1 Choice of instrument and some of its limitations	48
3.2.2 Selection of participants	50
3.3 Reliability and validity	51
3.4 Designing the questionnaire	54
3.4.1 The Questions	54
3.4.2 The pilot study	55
3.5 Analysing and presenting the findings	57
3.6 Strength and limitations	57
3.7 Ethics	58
3.7.1 Getting NSD permission, informing the participants and getting their consent	58
3.7.2 Choice of instrument	59
3.7.3 Informing participants and obtaining consent	59
Chapter 4: Results and discussion	60
4.1 Introduction	60
4.2 Question 1 and 2	60
4.3 Question 3	62
4.4 Questions 4 and 5	63
4.5 Question 6	65
4.6 Question 7	68
4.6.1Digital competence in a school setting	68
4.6.2 Digital tools	70
4.6.3 Programs	71
4.6.4 The definitions vs the Framework	71

4.6.5 Creating standards	72
4.7 Question 8	73
4.8 Questions 9 and 10	74
4.8.1 Introduction	74
4.8.2 Mixed material	76
4.8.3 Basic digital competence	80
4.8.4 Making a presentation	82
4.8.5 New tools	94
4.8.6 Writing	95
4.8.7 Sources	97
4.8.8 Practising for life in the classroom	99
4.8.9 Cooperating to create a composite text	103
4.8.10 What was not mentioned	104
4.9 Question 11	108
Chapter 5: Conclusions, limitations and further research	109
5.1. Summary of the results	109
5.2 Digital challenges	110
5. 2.1 Recorded presentations	110
5. 2.2 Introductory instruction on digital competence	111
5.2.3 Using the digital dictionaries/translation programs	112
5.3 Limitations	113
5.4 Further research	115
5. 4.1.Evaluating sources and citations	115
References	118
Appendices	123
Appendix I: Letter of approval from the NSD.	124
Appendix II: Invitation to take part in the study	126
Appendix III: Questions for the participants (the teachers)	127
Appendix IV: Answers to question 6	130
Appendix V: Answers to question 7	132
Appendix VI: Netiquette for teachers in Hordaland	135
Appendix VII: Platforms, software and sites mentioned in the lesson-plans	136

Appendix VIII: Preapproved websites for use during exams in Hordaland County	138
Appendix IX: Answers to questions 6, 7, 8, 9, 10 and 11	139
Appendix X: Pedagogical focus in learning projects in Hordaland	159

## List of figures:

Figure 1: Participation	62
Figure 2: Gender distribution based on people accessing the survey	63
Figure 3: Gender distribution included answers	63
Figure 4: Years of experience teaching	64
Figure 5: Level of English taught	65

## List of tables:

## List of appendices:

Appendix I	Letter of approval from the NSD	124
Appendix II	Invitation to take part in the study	126
Appendix III	Questions for the participants (the teachers)	127
Appendix IV	Answers to question 6	130
Appendix V	Answers to question 7	132
Appendix VI	Netiquette for teachers in Hordaland	135
Appendix VII	Specific platforms, software and sites mentioned in the lesson-plans	136
Appendix VIII Preap	proved websites for use during exams in Hordaland County	138
Appendix IX	Answers to question 6, 7, 8, 9, 10 and 11	139
Appendix X	Pedagogical focus in Læring in Hordaland	159

#### List of abbreviations:

- K06: Knowledge Promotion 2006
- Itsl: abbreviation commonly used by teachers in Hordaland when referring to "itslearning", which is the LMS or platform used by teachers in Hordaland.
- VG1: first year upper secondary (classes or students)
- VG2: second year upper secondary (classes or students)
- YF: Norwegian abbreviation for vocational studies. The term is used by the participants in their responses to the questions in the survey.
- SF: Norwegian abbreviation for general studies. The term is used by the participants in their responses to the questions in the survey.

#### **Chapter 1: Introduction**

#### 1.1 Why this topic

The topic for this thesis was inspired by my own teaching experiences after the introduction of the Knowledge Promotion reform and computers became common in the classrooms. In 2007 I was teaching second year vocational classes using Workshop2 (Langseth, Lundgren and Skanke, 2007) as my main teaching material as the English teachers at my school had decided that this was the teaching material we should use. I soon found Workshop2 did not seem to "work" in the classroom-setting. Therefore, when writing my term paper in didactics, I took the opportunity to take a closer look at why. As my paper is not available to the reader elsewhere, a summary of my findings will be presented later in this chapter. The findings combined with a curiosity as to how other teachers understand digital competence and how they teach it, i.e. what goes on in other classrooms similar to mine, were the starting point for the development of this thesis 1. In this chapter the reason for my choice of topic will be further explained, the research questions introduced, hypotheses presented and the layout of the thesis described.

# 1.2 A classroom revolution: Digital competence becoming a basic skill

The educational reform known as the Knowledge Promotion from 2006, lists digital competence as a basic skill that is to be taught in all subjects all the way throughout primary and secondary school in Norway. Various arrangements have been set up by the counties in order for the upper secondary students to have access to computers at school and the students now each have their own PC or Mac, most of them also have their own Smartphone and some have an iPad in addition to the other two screens. For instance the Electronics classes at

\_

<sup>&</sup>lt;sup>1</sup> The title of this thesis was inspired by the old saying that "you cannot teach an old dog new tricks". According to Cambridge Dictionary the saying means "that is very difficult to teach someone new skills or to change someone's habits". I was reminded of this saying when watching a BBC police series called "New Tricks" where retired police officers (i.e. "old dogs") were recruited to reinvestigate and hopefully solve cold cases. The officers were to look into unsolved crime cases with fresh eyes and combine their experience, or "old tricks", with new ones such as new DNA technology. In this thesis, the "old dogs" refer to the English teachers, while the "new tricks" refer to new curricular aims and new technology that have become available. As a result teachers are required to teach new things in new ways using new tools.

Årstad upper secondary school have since September 2014 been trying out using iPads in the workshop to document their work there and at Voss students are documenting their self-designed PE activities with films made on iPads. This is thought to be especially helpful for those who have problems expressing themselves in writing (HFK/Læring i Hordaland, 2015). Some schools have stopped buying printed copies of textbooks for their students in one, some or all subjects (e.g. Nordahl Grieg upper secondary school uses paper books for the first years students in Maths, Geography and Foreign Languages) and are using e.g. the NDLA platform or Smartbooks instead. The Norwegian teachers have for many years been offered various courses on how to use ICT in the classroom in general or specifically within a subject. These courses have mostly been arranged by the relevant authorities in each county or by the textbook publishing companies. Workshops have also been held at a national level, at county and regional level as well as at individual schools. In addition there are lots of vlogs being made and blogs being published on how to use ICT in the classroom and flipped classroom videos are being made by teachers, published on Youtube and shared on Facebook.

In order to use ICT in the classroom, one needs access to the necessary equipment. In the autumn of 2007 the government decided that the upper secondary students should not have to carry the cost of buying teaching equipment and material themselves. As a consequence of this and of the introduction of digital competence as a basic skill, our local educational authorities (Hordaland County) bought laptops for the students to rent at a low cost from 2007 (first year students) and 2008 (second year students). The arrangement has since then been altered and the students' choices widened; the students are now free to buy and bring any type of PC or Mac with partial funding from the authorities. All schools are now equipped with wireless Internet access and classrooms have gradually been provided with projectors and SMARTboards. The practical part of the reform should therefore be in place.

From 2007 and onwards, the teachers were faced with not only a new curriculum, but also a completely different teaching environment. Krumsvik has on several occasions referred to the introduction of laptops in schools as a "revolution" (Krumsvik, 2007). The fact that each student is now having his/her own laptop during classes and for homework, is by many teachers considered as both a blessing and a curse; the blessing involving e.g. things like having instant access to vast amounts of information by means of a few keystrokes and teachers not having to interpret students' handwriting, and the curse involving for instance the information being unstructured and of dubious quality and maybe most easily noticed: the fact that the students (and teachers) now have all sorts of tempting entertainment literally at their

fingertips at all times. It also means that a textbook website has become a useful tool in teaching as it can be easily accessed in class and in most cases also in the students' spare-time. Most people in Norway now have access to the Internet in their private homes. Research made by Statistics Norway show that by 2014 nearly every household with children and 93% of population as a whole have some sort of Internet access, i.e. fixed or mobile broadband connection or broadband telephony (Statistics Norway, 2014). This was not the case in 2006 when the Knowledge Promotion was introduced; only 7 in 10 households had access to the Internet and 6 in 10 had broadband. 75% of the households had access to a PC, and it was used every workday by 66 per cent of the population (Statistics Norway, 2006). Three years prior to the introduction of the reform, only half the population used a PC on a daily basis and just 4 in 10 used the Internet at least once a day (Statistics Norway, 2003). The development in access and use both at work and at home has in other words been rapid.

The earlier mentioned "classroom revolution" has altered the relationship between teachers and students. Traditionally the role of the teacher has been that of the one in the classroom with the most knowledge of and experience in a particular field, and the role of the student has been that of the one trying to gain this knowledge and experience. When it comes to computer experience, many teachers have realized that very often the students are the ones with at least the best technical knowhow. Students of today may be referred to as screenagers (using Douglas Ruskoff's term from 1997); they live huge parts of their lives in front of some sort of a computer. It has been estimated that by the time they are 21, they have received 15 000 hours of formal education, spent 20 000 hours in front of a TV and 50 000 hours in front of a computer (Krumsvik, 2007). There are no indications that they in the future will be spending less time on computers; iPads and similar computers are now advertised as suitable for 3-4 year-olds. iPads are also becoming increasingly more common in kindergartens and apps are being designed for use in kindergartens in particular (e.g. Pedagogisk Praksis, 2010). The aim of the Norwegian Centre for ICT in Education, which is set up by the Norwegian Ministry of Education and Research, has also been widened to include this group. The centre is to "work for smarter learning and higher quality throughout the education system by offering a variety of services for ICT in education" not only in primary and secondary education, but also in teacher training as well as in kindergarten (IKTSenteret). Quite many children therefore now receive some sort of computer training, formally or informally, from the time they are able to aim and press a button or operate a touchscreen. Nowadays, students usually do not remember a time without cell phones and computers. They are therefore often

referred to as *digital natives*; "Our students today are all "native speakers" of the digital language of computers, video games and the Internet" (Prensky, 2001, p.1). Prensky claims that due to their huge exposure to digital media from an early age "today's students think and process information fundamentally differently from their predecessors" (Prensky, 2001, p.1).

Most teachers do not have the kind of experience of and relationship with computers their students have. Prensky (2001) calls these non-natives *digital immigrants*. According to Prensky these immigrants speak a different "language" from the native speakers:

As Digital Immigrants learn – like all immigrants, some better than others – to adapt to their environment, they always retain, to some degree, their "accent," that is, their foot in the past. The "digital immigrant accent" can be seen in such things as turning to the Internet for information second rather than first, or in reading the manual for a program rather than assuming that the program itself will teach us to use it. Today's older folk were "socialized" differently from their kids, and are now in the process of learning a new language. And a language learned later in life, scientists tell us, goes into a different part of the brain. There are hundreds of examples of the digital immigrant accent. They include printing out your email (or having your secretary print it out for you – an even "thicker" accent); needing to print out a document written on the computer in order to edit it (rather than just editing on the screen); and bringing people physically into your office to see an interesting web site (rather than just sending them the URL) (p. 2).

Prensky's view of students and teachers as digital natives and immigrants have been met with criticism by many, e.g. Erstad (2010b, 58-59) and Li and Ranieri (2010).

How and how often computers are used in teaching also seems to be linked to the teacher's age. Rogne (2009) points to the fact that Swedish research shows that younger teachers are more positive to the use of computers than their older colleagues. It is a fair assumption that the situation in Norwegian schools is the same, and as the young teachers make up a minority, this positivity or lack thereof may affect the way the students are taught and what they are taught.

#### 1.3 Analysis of a textbook

Nearly a decade after the introduction of the Knowledge Promotion, one may expect that the full effect of the reform should be easily spotted in each and every classroom across the country. However, my term paper in English didactics written in 2012 indicates that this might not be the case. In the paper I studied how the digital competence aims in English subject curriculum have been reflected in the textbook Workshop2 (Langseth, Lundgren and Skanke, 2007), which, although written to suit an earlier version of the curriculum than the present one, might still be in use at some schools for second year upper secondary vocational school students of English. The study revealed that the textbook authors did not seem to have fully understood the term and that the textbook only to a limited extent might promote the students' digital competence. The genres that are covered in Workshop2 are rather traditional and there were found no references in the books to modern genres typical of the network society. The textbook comes in different versions depending on the line of study it is meant to be suited for. The first four chapters are identical in all versions, but none of the bulletpoints indicating competence aims in any of these first four chapters refer to anything that may be said to relate to digital competence. The accompanying self-assessment forms confirmed the impression that digital competence is not among the primary learning objectives in those chapters. There are, however, two lines that may be said to refer to digital competence: "I can explain how a multi-component (sammensatt) text communicates messages "(chapter 1) and "I can use a spell checker" (chapter 2).

In the textbook the tasks are sorted by different numbering (1.1, 1.2, 1.3, etc.) as well as under the headlines: *Reading and understanding/Listening and understanding, Speaking, Writing*, and *Further study*. The last type is occasionally marked with a "www" to signal that Internet access is required. This might indicate that the authors have had the basic skills in mind when designing and sorting the tasks and in doing so have thought of digital competence as a skill that should be worked on separately. Rogne warns that the division into five basic skills may signal "separateness" and that there at base lies an outdated view of what a text is. He argues that to fully incorporate digital skills in the subjects, digital reading and writing should be the normal thing to do and not be seen as something special (Rogne, 2008, p.234). The authors seem to be "victims" of outdated views of what texts are.

Whenever the students are required to access the Internet, there is an extensive use of preapproved texts. Though such texts may be a useful tool to help the students to keep "on

track" as they tend to easily get lost on the World Wide Web, it does not promote advanced digital competence such as using advanced searches and judging the relevance of the findings.

The repeated use of the words "pages" and "text" may indicate that the authors have thought of the website in much the same way as one would of a book seemingly asking the students to use the website in the same manner as one would a book. In addition it is a problem that the reference to where on the website the students will find the text and the link is not very clear: when linking to the webpage, it is not possible to link directly to the tasks, as the hyperlinks are identical and will always send you back to the overview of the chapters. This causes problems when using the website tasks in class: instructions posted for the students on the learning platform (e.g. itslearning<sup>2</sup>) cannot be linked directly to the tasks. This is due to the program that has been used when producing the website and is, in my view, a major flaw in the design of it. This might be yet another indication that the authors have thought in terms of books when making the website as the teachers are forced to instruct the students in ways similar to what one would do when using a book and it makes the manoeuvring on the website very teacher dependent. Consequently it will be almost impossible to ask the students to find the tasks and do them outside the classroom.

Skulstad says "modern technologies have made other means of communication beside spoken and written language readily available to the average participant in a communicative situation" and that "as a consequence our genre repertoire for consumption and production has been widened" (Skulstad, 2009, p. 258). In Workshop2 the view of genre seems to be traditional and communication seems to be understood as spoken and written language.

Activity 4.52 may be seen as a result of this kind of thinking: "Choose an American president you think is interesting and important. Give a presentation for your class or write a text for your portfolio" (Langseth, Lundgren and Skanke 2007). I believe that many students and teachers will read this as an instruction to make a traditional oral presentation or to write a text (e.g. a short biography). It is of course possible that the students *may* themselves choose to (or the teachers *may* instruct them to) use digital tools for this such as searching the net for information, making a power point for the oral presentation or illustrating a text written on their computer with pictures found online or possibly even links to film-clips and/or soundtracks. The task does not say anything about the audience, purpose, context and genre

\_

 $<sup>^{2}</sup>$  This is the official way of spelling the brand name (see for instance www.itslearning.co.uk) and will be used throughout the thesis.

of the written option is either. This could have been a very good opportunity to encourage the students to use and develop their digital competence (e.g. their critical use of sources, choosing to use relevant digital tools compared to the context), but it should be more clearly phrased in the task. Skulstad has made similar findings (Skulstad, 2009, p.263).

The conclusion was that the authors of the teaching material seem to not have had a clear enough plan for how digital competence should be developed and that they might have considered that using a computer for writing, reading and searching for information (preferably on websites selected by the authors) would be sufficient for the students to develop their digital competence in English. I do not, however, believe the students become better at finding their way in the information jungle from working with *Workshop2*: they do not become "websmart".

#### 1.4 Hypotheses

Based on those findings as well as discussions I have had with colleagues since the reform was introduced, it is my hypothesis that quite many English teachers still do not fully understand the term digital competence and that this affects their praxis in a negative manner.

Skulstad states that "the problem of integrating digital skills into subject-related activities is left to teachers and textbook writers" (Skulstad, 2009, p.262). Since 2000 there is no longer a national system of approval of textbooks used in Norwegian schools. It is therefore left to the individual schools and the teachers to select the teaching material and to make sure that all the curricular aims are covered. Even though publishers market their products as meeting the requirement in the curriculum, there is no longer an official, external guarantee to rely on. After the implementation of the Knowledge Promotion in 2006 (K06), there are no longer any limits or requirements as to what methods and material the teachers may choose to use. This means that the individual schools and teachers may choose to have textbooks or no textbooks, just online material, design their own material, any combination of these options or other ways of working towards the competence aims. As a result of this, a lot of power and responsibility have been left in the hands of each and every teacher; that teacher's individual choices when designing his or her lessons will decide what the students will be taught. If for instance the teacher in question is not aware of all curricular requirements and/or has misunderstood or not fully understood the aims, this will result in the students not being taught what the authorities have decided that they should be taught. The aim of the current thesis is therefore to gain some insight into what actually is being taught in the some English classrooms in Hordaland County.

#### 1.5 Previous research

How ICT is being used in classrooms and how digital competence is being taught, has been researched in different ways and at different levels for some years now. There has been carried out research on a cross-national level, like Preparing for Life in a Digital Age: The IEA International Computer and Information Literacy study (ICILS, 2013) in which Norway was included and down to the very local level of e.g. Hordaland county carrying out surveys where the teachers answer questions on what they themselves can and cannot do (e.g. make a power point, send an email with an attachment, register absent students on the digital protocol *Skolearena*) (see also section 2.6.3). The local studies are not possible to view as they are intended for internal use only.

Haltvik and Christophersen (2012) studied actors predicting students' digital competence and revealed considerable variation in digital competence between schools and within schools..

They pointed to the necessity of supporting and developing school-based digital competence and that schools need to identify digital deficiencies and digital achievements. They among other things studies how the students' conditions at home (e.g. culture capital) as well as academic aspirations affected their digital competence at school.

Blikstad-Balas (2012) studied how the new tools are used in the classroom as well as what sort of challenges the teachers and students were faced with after the introduction of computers in the classroom. She found that quite a lot of time was wasted on non-curricular activities and that this especially happened to a large degree when the teacher tried to use modern technology such as projectors and engage with the whole class. The opposite was the case when the students were themselves engaged in solving tasks using digital tools.

#### 1.6 The aim of the thesis

In this thesis, the aim is to study the digital revolution at a micro-level: firstly to compare the term *digital competence* as used in the English subject curriculum and in other documents published by the Norwegian educational authorities and Hordaland County with the definitions provided by the teachers, and secondly to look into how digital competence is being taught in English classrooms in Hordaland by studying a collection of plans for English lessons. The research tool that has been chosen is a survey carried out on the local learning platform called *itslearning*. Participants have been English teachers in Hordaland County

teaching either VG1 SF (first year upper secondary school general studies) or VG1 or VG2 YF (first or second year upper secondary vocational studies) during the past two years.

#### 1.7 The structure of the thesis

The thesis is structured in five chapters with subsections at two levels. In the first chapter an introduction to the topic and thesis has been given. The second chapter will focus on the background for the use of the term digital competence in Norwegian education and the use of the term in the curricula and other documents will be discussed. The chapter will both give an overview of the development of the term digital competence, as well as a more specified presentation of how it is used by the authorities in official documents. The details of the research design will be described in chapter 3 where the research methods used to collect the data for the thesis will be presented and there will be a discussion of why they have been chosen. In addition, how the questions for the questionnaire were designed will be discussed. In that context, there will also be a description of the pilot study which was carried out prior to the main study in order to test out the questionnaire. In chapter four the results of the research will be presented and discussed. Through the discussion in this chapter the hypotheses connected to the research questions will be tested. Finally, in chapter five, the findings will be summed up and suggestions of how the study carried out in this thesis could be developed in further research will be presented. Please note that quotes from the participants' answers will be included unedited and misspellings, grammatical errors, slang, informal language, emoticons, etc. will be left in.

#### **Chapter 2: Background**

#### 2.1 Introduction

In this chapter the focus will be on what the term digital competence might involve, how the new requirements have been presented to the teachers by both the national and local authorities, i.e. the educational authorities in Hordaland County. There will also be a section dealing with what sort of responses the introduction of computers and Internet access in the classrooms has caused; in particular how this has been expressed in mass media as this may have affected the (English) teachers' motivation and priorities when implementing the new requirements in their teaching. Very little information and training from the authorities have been subject specific, but rather meant for all teachers. The reason for their choice of a rather general and all-subjects approach might be that the basic skills, including digital competence, is to be implemented in all subjects. The scope in this chapter will therefore be fairly wide.

Various documentation, such as the curriculum, steering documents, surveys, webinars, etc., which are likely to have influenced the relevant teachers' praxis over the past few years or more will be commented on. This includes of course the Knowledge Promotion and the White Paper preceding it, as well as the different versions of the English Subject Curriculum, the Framework for Basic Skills, and previous exams. In addition, documents in which the employer, Hordaland County, have instructed its employees are relevant, such as the plans for how to develop teachers' and students' digital competence. These documents will be commented on with regard to how the term digital competence is understood and what kind of digital competence is focused on. In addition, there will be a brief outline of the development of the content of the term.

#### 2.2 K06 and the introduction of basic skills

In its Report No.30 to the *Storting*, titled "*Culture for Learning*", the Ministry of Education and Research stated prior to the implementation of the Knowledge Promotion in 2006: "Schools cannot teach us everything, but they can teach us to learn. We wish to improve the pupils' basic skills. These are tools for all other learning activities and therefore crucial for further education and work", adding that "Since society constantly changes, schools cannot supply pupils with all the knowledge they will need as adult citizens. However, it is important that schools give pupils the basis they need for lifelong learning. Development of basic skills

is a prerequisite for lifelong learning" (Ministry of Education and Research, 2004). Preparing the students for lifelong learning can therefore be seen as a main goal for the educational system.

In order to achieve lifelong learning, there are five basic skills listed in the Subject Curricula in the Knowledge Promotion of 2006 (K06) i.e. the ability to express oneself orally, the ability to read, numeracy, the ability to express oneself in writing, and the ability to use digital tools (Directorate for Education and Training, 2006, p.3). This is the first time there is a focus on any kind of digital competence as a basic skill in the curriculum. It was, however, somewhat unclear in the earliest version of the English subject curriculum how especially digital skills were to be developed within that subject, though the use of the phrase "ability to use [...] tools" indicates a technical focus i.e. learning how to operate certain equipment relevant to the subject. The various versions of the English subject curriculum will be further discussed further in section 2.3.

In order to clarify this and other questions raised over what exactly the basic skills were meant to cover, the Norwegian Directorate for Education and Training published a "Framework for Basic Skills" in the beginning of 2012. There they state that the five skills are "basic to learning in school, work and social life. These skills are basic in the sense that they are fundamental to learning in all subjects as well as a prerequisite for the pupil to show his/her competence and qualifications (Directorate for Education and Training , 2012, p 5). They also provided a detailed chart for each basic skill outlining what the students are supposed to be able to do. This chart will be discussed later in chapter 2 and in chapter 4.

Since the 2006 reform all subject-specific curricula describe how the five basic skills contribute to the development of the pupils` competence and qualifications and how these skills are integrated into the subject. The basic skills are to be integrated and adapted to each subject at all levels of the education. They are for that reason also relevant to English. It will therefore be interesting to see how the present day English teachers understand the term digital competence and how promotion of that basic skill has been integrated in their lesson-plans. My research questions are therefore, as follows:

How do upper secondary English teachers in Hordaland define the term digital competence?

What kind of digital competence is promoted in their teaching?

#### 2.3 The English Curriculum

The English Curriculum has so far been revised twice since the introduction of K06; the first edition of the K06 English curriculum was published in 2006, then revised and republished in 2010 before the current edition was published in 2013. Before the latest revision, a framework for basic skills was developed. In the following the three different versions of the curriculum as well as the framework will be presented and the changes discussed in the order they were published.

#### 2.3.1 The 2006 version of the English curriculum

In the first edition of the English subject curriculum after the implementation of K06, the requirements for what kind of digital competence to be promoted within English was somewhat vague. In the general part it is explained what the basic skill "Being able to use digital tools" means in the English subject. It "allows for authentic use" and "opens for additional learning arenas". It is pointed out that English is "in many cases a requirement for using digital tools" and using it might help "develop English linguistic competence". Finally, it is underlined that it is important to be "critical of sources and aware of copyright issues and protection of personal privacy". The word digital is used twice in the section relevant for the teachers in this study: "use a wide selection of digital and other aids independently, including monolingual dictionaries" and "produce texts with complex content using digital media". In addition the students are required to "extract information from spoken and written texts". This might include "texts" from digital sources, but they would most likely also include other elements than just spoken and written text. One aim, "present and discuss international news and current events", clearly encouraged the use of digital tools as material for covering these topics are not likely to be found in the textbooks. The students were also to learn to "select and use content from different sources independently, critically and responsibly" (Norwegian Directorate for Education and Training, 2006).

#### 2.3.2 The 2010 version of the English curriculum

In the introduction to both the 2006 and the 2010 version of the English Subject Curriculum it is stated that being "able to use digital tools in English allows for authentic use of the language and opens for additional learning arenas for the subject of English. English language competence is in many cases a requirement for using digital tools, and using such tools may also help the development of English linguistic competence. Important features of the English

subject in digital contexts include being critical of sources and aware of copyright issues and protection of personal privacy" (Norwegian Directorate for Education and Training, 2006, Norwegian Directorate for Education and Training, 2010). This quote points to an interdependence between digital competence and English as the use of digital tools requires prior knowledge of English and the use of digital tools may help develop the student's English language competence further. Skulstad warns that "Adding digital competence to subject-related activities opens for certain misinterpretations: it may be interpreted as the ability to operate digital tools" and that "the concept of *Bildung* should be introduced as a central component" (Skulstad, 2009, p.261).

It is somewhat unclear in the 2010 version of the English curriculum what other skills than being able to use digital tools the students are required to develop. Under the heading "Language learning" it says that the students shall (among other things) be able to "exploit and assess various situations, working methods and strategies for learning English" and "use a wide selection of digital and other aids independently, including monolingual dictionaries". This means that the students must learn to make educated choices of what methods/approaches will be most beneficial when working within the subject whether these chosen methods/approaches, i.e. learning strategies, will involve the use of digital tools (such as e.g. online dictionaries) or not.

Under the heading "Communication" one of the things the students should be able to do is to "select and use appropriate reading and listening strategies to locate information in oral and written texts" as well as "select and use appropriate writing and speaking strategies that are adapted to a purpose, situation and genre". In the subsequent paragraph the following genres are mentioned: "poetry, short stories, novels and drama". One might expect the term genre to carry the same meaning in both instances, which means that modern genres that are typical of a network society are not mentioned here. One example of a modern, multimodal text may be the 2012 video that was posted online and which was investigated by the police (see e.g. Franson, Gilbrant, and Meldalen 2012) The content of the video was interpreted as a threat on the lives of Norwegian officials including the Crown Prince, the Prime Minister and the Minister of Foreign Affairs. The video does not belong to any of the genres mentioned in the curriculum. Though the message is very clear, it is expressed neither in writing nor is it directly voiced in words, but in a combination of the topic in song lyrics and what may seem to be carefully selected photos presented in a structured order to among other things create contrast. Although the students are required to be able to "produce composite texts using

digital media" there is little mentioning in the curriculum of learning how to analyse such texts.

Further on it states that the students should be able to "select and use content from different sources independently, critically and responsibly". Skulstad states that "The inclusion of critical skills is important" (Skulstad, 2009, p. 262). In my experience, however, the students tend to be quite uncritical to what they find on the net and to use liberal cut-and-pastetechniques without stating neither sources nor marking quotes very carefully. There was therefore a need for a specification of exactly what "independently, critically and responsibly" meant in practise. A distinction between what in this respect is considered basic and what is considered more advanced digital competence was needed for teachers to be able to assess the students' progress.

#### 2.3.3 The Framework

In January 2012 a national framework for the five basic skills was approved and published by the Norwegian Ministry of Education and Research. It was built on "decisions made in the Norwegian Parliament based on White Paper No.30 (2003-2004)". The framework was to be used by subject curricula groups appointed by the Norwegian Directorate for Education and Training «to develop and revise National Subject Curricula" (Norwegian Directorate for Education and Training, 2012, p.4). Thus this framework was part of the basis on which the 2013 revision of the English curriculum was developed. In the framework a distinction was made between for instance acquiring and processing information by means of digital tools, using digital tools to take part in multilogues and reflecting on the ethics of social media to name a few, very different examples.

The framework covers the basic skills: oral skills, reading, writing, digital skills and numeracy and is divided into these. They are considered basic "in the sense that they are fundamental to learning in all subjects as well as a prerequisite for the pupil to show his/her competence and qualifications".. In each subject—specific curriculum, it is to be described how these skills "contribute to developing the pupils" competence and qualifications" and these skills are therefore integrated in each subject (Norwegian Directorate for Education and Training, 2012, p.5).

On each set of skills it is explained what the skills include and how they are developed. A grid chart outlines four subcategories and five levels of skills covering both compulsory and

secondary education. The levels are simply numbered. For digital skills four subcategories are labelled: search and process, produce, communicate and digital judgement. It is mentioned that the "requirements are general and serve as a basis and point of reference for developing subject and grade relevant competence aims" (Norwegian Directorate for Education and Training, 2012, p.5). As the grid's skills descriptors will not be relevant in all subjects, it is up to each subject curriculum group to decide on "which grids, cells and levels are relevant for their subject as well as for different age groups of students" (Norwegian Directorate for Education and Training, 2012, p.5). These choices should therefore be reflected in the most recent edition of the English curriculum for the upper secondary students.

#### 2.3.4 The 2013 version of the English curriculum

In 2013, prior to the survey for this thesis, the most recent version of the English curriculum was introduced. Here it is specified more clearly which digital competence should be focused on when teaching students at the levels relevant for this study. In the general part of the English curriculum (which applies for both primary and secondary students of English), there is a separate section specifying what "digital skills" means in the subject of English. Digital skills mean "use of a varied selection of digital tools, media and resources to assist in learning, to communicate in English and to acquire relevant knowledge in the subject of English" (p.5). Digital sources are seen as a means to "experience English in authentic, natural and unadapted situations" (Norwegian Directorate for Education and Training, 2012, p.5). For the first time there is a reference to "Formal requirements in digital texts" which are described as "effects, images, tables, headlines and bullet points [that] are compiled to emphasise and communicate a message". The development of digital skills also involves "gathering and processing information", "using digital sources" in written and oral communication critically and independently. The students should also develop "knowledge about copyright and protection of personal privacy through verifiable references to sources".

In the section for English at the level relevant for this study, it is stated under "Language learning" that the students should be able to "evaluate and use different situations, working methods and learning strategies". It is not directly stated whether these situations, methods and strategies include digital alternatives, but the passage might be read that way as the students are also required to be able to "evaluate different digital resources and other aids critically and independently, and use them in own language learning".

When it comes to "Oral communication" it is stated that the students should be able to "listen to and understand social and geographic variations of English from authentic situations" and to "express [themselves] fluently and coherently in a detailed and precise manner suited to the purpose and situation. Where these authentic situations should take place, is not stated, but the most practical way of meeting this requirement is most likely by using online media.

In written communication the students are required to among other things "produce different kinds of texts suited to formal digital requirements for different digital media" as well as "evaluate different sources and use contents from sources in an independent, critical and verifiable manner". The first passage is quite open and probably on purpose a bit vague. The reason might be that this leaves an "opening" for including new digital media and "new kinds of texts" which the people behind the revision might not have heard of at the time of writing it, but which in our digital era might develop in the timespan between this version of the curriculum and the next revision or reform. The second quote refers to what the students usually are required to do during exams: find sources, evaluate them, use the reliable ones and state them. This requirement, having many similarities to the requirements mentioned under "Language learning", is also focused on in the exams. Therefore one might expect this to be something the teachers will choose to focus on in their lesson-plans. This will be discussed in section 4.8.

Under "Culture, society and literature" the students are required to "present and discuss current news items from English language sources". This would be difficult to do without access to the Internet as "current news items" are unlikely to be found in the students' textbooks. Another requirement is "discuss and elaborate on English language films and other forms of cultural expressions from different media". The term "different media" might be read as an encouragement to also use other digital media than films as a basis for discussions on culture.

#### 2.3.5 Exams

What the students are asked to do on the exams is likely to influence what the teachers focus on and prepare their students for during lessons. The exam sets are given additional influence as they are commonly used as mock exams or as model for the making of mock exams. It is therefore relevant to look at what sort of digital competence that has been required in recent exams. There are two types of exams for the relevant groups of students: the 5 hour written exam prepared and graded by the national authorities and the half hour, oral exam prepared

and graded locally. It is not possible to gain an overview over what the students are asked on the oral exams without contacting each and every school in the county. In addition, there might be differences between the teachers at each school. Hence, the focus here will be on the national, written exams which are arranged twice a year (in May and November). The Norwegian Directorate for Education and Training are responsible for the exams and the complete sets for the six most recent exams are available on their website, www.udir.no, although access requires a valid password and can therefore not be linked to. Each exam set is focused on a theme and consists of a preparation booklet and an exam booklet. The preparation booklet presents the topic for the exam as well as some appendices and is handed out 24 hours before the exam. The topics for the six past exams have been as follows:

- Spring 2013:Topic: Roles and Expectations
- Autumn 2013: Topic: People who have made a difference
- Spring 2014: Topic: Are people masters of their own lives?
- Autumn 2014: Topic: Online or offline: how to be *Netsmart*
- Spring 2015: Topic: "Education's role in society"
- Autumn 2015: Topic: Saying "I'm sorry" and making amends in the English-speaking world

The exam booklet includes the tasks and may also provide some additional appendices.

During the preparation period the students are allowed to use any aids including the Internet.

The same applies for the exam itself, though with the exception of means of communication, e.g. Internet-access. It is specifically stated that translation programs are not allowed.

On the day of the exam the students are asked to write two texts: one out of two short answer tasks and one out of four or five long answer tasks. The latter is based on the theme covered in the preparation booklet. In this context it is relevant to get an overview over what sort of material are included in each set as well as what the students are required to do.

All sets have in common that they ask the students to mark citations and state their sources. For books that means stating the author and the title and for online sources author, exact Internet-address and the date it was retrieved are required. During the preparation period the students are encouraged to collect additional material and information within the given topic. Any online material will then have to be either printed or downloaded to the individual student's computer prior to the exam. There is a focus on using and stating sources correctly.

The appendices provided by the booklet makers function as "role-models". The goal for the citations and references is stated in the standard, general instruction in the booklets: that the reader must be able to find them.

In the spring 2014 exam, which was the first exam after the latest revision of the curriculum, the students were (mostly) no longer told what genre the long answer task should be written in. Instead the students were instructed to be aware of their audience and create a text that is suitable for the occasion in order to get their message across. Normally, one or two tasks in each set involved some kind of digital competence. One example can be task 1a spring 2014 where the students were required to use information provided in the booklets regarding a young man called Sebastian Knowles. The students were supplied with his CV, application and Facebook status which gave conflicting information. The students were then asked to discuss whether he is qualified and suitable for the advertised job and thereby face the challenge of deciding which sources to trust.

Another example is task 1b (short answer) from spring 2015, The task required the studentes to comment on quotes varying in formality, language and type of text. All of the quotes were written by the makers of the booklet and the least formal one read: "Yo Mrs W!! Hrd ur retiring. Jst wanna say u woz a gr8t teacher. Never liked maths till we had u. Who dwe get nxt yr? Roz ". The quote is typical of the language used in social media.

The autumn 2014 set is unique in this context as all tasks and texts are about being "netsmart". In the preparation booklet the students are instructed to in their preparation period "think about and discuss how digital technology is affecting how we live and work, and how we spend out leisure time, in a good or a bad way". In the exam booklet the short answer tasks asked the students to either warn young people "about what [they] think are the biggest dangers they face on the internet" or "comment on the Tinder app and the writer's attitude to it". On long answer they could choose between four alternative tasks all involving some sort of digital competence: discuss the statement "Modern digital technology is a blessing and the only way forward", create a text in which discuss whether too much time spent in front of a screen may actually pose a health threat, discuss the digital skills and knowledge a person taking their education and career path will need or reflect on that literature, films and digital technology may help us understand other people and the world around us. This is the first time the students have been this clearly asked to reflect on digital Buildung. In addition both

the preparation and the exam booklet contained an unusually high number of cartoons which encouraged the students to engage with visual aids.

#### 2.4 Digital Competence: The choice of term

The recognition of digital competence as a basic skill is a consequence of the increasing digitalization of our society and a recognition of the importance of having that competence. The digitalization is a continuous development, and it is therefore not easy to define what digital competence is in detail: the content of the term keeps developing, too.

In the 1980s and 1990s there was a focus on developing (clearly defined) skills in order to be awarded certificates to prove your growing digital competence. In 2001 the American Educational Testing Service listed the following steps one should complete in order to achieve digital competence:

Access + Manage + Integrate + Evaluate + Create

These steps were to be the basis for new curricula and for developing new ways of evaluating students. Each of these steps requires prior basic skills like reading and writing (Erstad, 2010a, p 100).

There is a rather strong, technical focus as the main aim is on what the students can do. Today there is an increased focus on the ethical side of digital competence: what the students should (not) do. Culture and *Buildung* are central to the discussion. Erstad (2010, p.101) defines digital competence as "skills, knowledge and attitudes acquired through the use of digital media". According to Erstad, digital competence is also known as media literacy or digital literacy. Traditionally literacy has meant being able to read and write, but today most people agree that literacy also requires an understanding of both the culture and the context of a text. There is also a general acceptance of that there are many types of literacy including cultural, visual, computer, information, and network literacy (Erstad, 2010a, pp. 95-97).

Belshaw (2012) favours the term digital literacies. He points to eight elements: Cognitive, Constructive, Communicative, Civic, Critical, Creative, Confident, Cultural. He also underlines that change is central to the content of the term digital literacies. Knowing how to use floppydisks is mentioned as an example of outdated digital competence. Belshaw further argues that remix is essential to the term, and that in the modern world items are changed,

altered, borrowed, combined, used and reused in different contexts and the intended message is continuously altered. Hence which context a message is communicated in becomes essential to interpretation.

Belshaw also states that there in digital literacies exists languages which are different to what is found elsewhere and that reading in a digital setting requires different knowledge than reading in a non-digital setting. Memes is mentioned as an example of something that cannot be read without knowledge of the context. He therefore claims that staying digitally literate requires lifelong learning.

When listing the basic skills in the 2006 and 2010 version of the English curriculum the term "being able to use digital tools" is used. In the 2013 version this is changed to *digital skills*. and the Framework for basic skills uses the same term. In this thesis I have chosen to use the term *digital competence*. Many researchers prefer digital literacy or literacies. Krumsvik (2008) argues that digital competence and digital literacy are treated more or less as synonyms. The reason for my choice of term is that the word *literacy* does not exist in Norwegian and the term competence is more commonly used in Norwegian literature and official papers. In the curriculum the goals or what the students are to learn and master are referred to as *competence* aims. Therefore and in order to not confuse the term with other basic skills, digital competence has been used here.

#### 2.5 The revolution: Online in the classroom

The introduction of computers and Internet in classrooms has been met with a mix of enthusiasm and scepticism. The change, or revolution, has been hotly debated by students, parents, teachers, their representatives as well as politicians, researchers and more or less anybody else able to form an opinion on the matter. Strong reactions and opposition against change of artefacts used in teaching is not something new. Breivik (2015, pp. 22-32) the current protests to the ones in Ancient Greece and writing was introduced as a way to store, share and present knowledge. In the current debate, it has, on one hand, been claimed that laptops with Internet access provides new teaching opportunities, can make the teaching of English up-to-date and that by using social media in class one can meet the students at their "home turf" and thereby make the students more motivated. The constant Internet access has, however, also been blamed for leading the students astray, making them waste their precious school-hours on online entertainment. Especially the students' use of, and in some cases

addiction to, social media has received a lot of attention and questions have been asked about how teachers should handle social media. There seems to be two main routes of action: those who "hate" social media being available in the classroom and try to ban it in different ways and those who "love" social media and see it as a provider of new didactic opportunities. Below some of the main arguments of the lovers and the haters will be presented, before Hordaland County's view on the matter will be discussed.

#### 2.5.1 The lovers

The lovers argue that teachers on social media is a good way to meet students "where they are" and an efficient way to teach the students a subject as it is claimed that the students will work harder when others can read their thoughts and reflections regarding e.g. an article or how they suggest solving a subject-related problem. In addition, using Facebook provides an excellent opportunity to give the students some guidance on netiquette in a real life situation. One example is Liv Marie Schou who teaches Norwegian at St. Hallvard Upper Secondary School who has a Facebook page where the students are asked to for instance read and comment on chronicles and articles. It is worth noticing that she does not become Facebook friends with her students, but relates to them as a teacher without getting access to their private accounts or giving them access to hers. By writing on the open page, their comments can be read by a real audience who might give feedback on what they write. Interviewed students agree that the fact that they write for an audience and that it is two-way communication inspires them to make more of an effort and their work more meaningful (Heimdal, 2010). Professor Krokan at NTNU shares her view on Facebook and social media claiming that "it is a sin of omission not to be on Facebook. [The teachers] must be there because they cannot understand the world of their students if they are not", (Ringseth, 2012).

Berit Skog favours incorporating social media into the teaching activities also for students at higher levels. She argues that:

"Facebook can be used as a strategic tool at all levels of the education system. Not as a substitute for, but as a professional and social supplement to the other educational offerings, such as itslearning, classroom teaching, lectures, etc. Students' interest in and use of new digital media should also be reflected in teaching" (Skog, 2012)<sup>4</sup>

\_

<sup>&</sup>lt;sup>3</sup> My translation

<sup>&</sup>lt;sup>4</sup> My translation

Skog has since 2007 used Facebook to communicate and share material with her NTNU students. She argues that this gives her an opportunity to meet her students at their own arena and makes it easy for students to contact their lecturer as well as fellow students to get advice and help with their studies. This does, however, require the students themselves to choose to be active participants on the page. She claims that there are also social benefits, especially at the beginning of the school year: the users have profile pictures which make it easier for people to get to know each other. In addition, her page is used by students to inform each other about events in the evenings (Ringseth, 2012).

A survey Skog carried out in 2011 shows that already by then quite many pupils and students were friends with their teachers on Facebook and that the percentage increases with the students' age. For the groups most relevant here the numbers were 37 % for 16-17 year-olds and 45 % of the 18-22 year-olds. For those under 13, 18 % were friends with teachers on Facebook. This percentage is a bit surprising given that no one under the age of 13 should have a Facebook account according to Facebook guidelines. For those between 13 and 15, one in four had teachers as Facebook friends. Skog argues that especially for young Facebook users it might be a good idea to have teachers (and parents) as friends on Facebook as the fact that these people will read the posts might stop the children from posting things they should not post or ensure that they receive guidance from responsible adults early on. She does, however, point out that this might also pose as a problem as the constant access to posts might result in teachers and parents becoming peeping Toms watching the youngsters every move and thereby limiting the youngsters' chances of private life.

#### 2.5.2 The haters

Accusing fingers have been pointed in different directions: teachers have been accusing students of being lazy preferring to spend school-hours on online entertainment and lacking the ability to focus on their assigned tasks. The educational authorities have been accused of sending teachers on a "mission impossible" by giving the students this tempting toy to play with and at the same time requiring the teachers to win the competition for the students' attention. Frustration has run high and has hit the headlines several times.

VG.no has for instance run headlines about students spending more than half their time on social media during lessons (Ertesvåg & Sandblad, 2014) and lazy students watching entire series on Netflix during class (Ertesvåg, 2014). Such and similar articles have led politicians

to call for actions to be taken, e.g. the young representatives for the conservative party, Høyre, have argued that the computers should simply be taken away from the students (Vigsnæs, 2013).

The students do not seem to deny wasting time on social media and Netflix, but some students do, however, claim this is due to a lack of teacher instruction on how to use their laptops for school-work: as the students are familiar with using the laptop for entertainment in their spare-time, switching to using it for school-work is not easy or automatic and requires more instruction and guidance from the teachers than what they have received. Another view is championed by student representative Lise Veronica Huynh, leader of the student council at Kristelig Gymnasium (upper secondary school in Oslo), who supports her school's policy of students not having their own pc in class. She thinks that school should not be the arena for learning to use the Internet, but rather become an arena where students have the luxury of being offline and not feeling the pressure of having to update their social media all the time (Ertesvåg, 2014, Vigsnæs 2013).

Research carried out by Marte Blikstad-Balas at the University of Oslo on upper secondary students has received a lot of media attention (Blikstad-Balas, 2012). She found that the students are given a lot of freedom to choose how much time they spend online at school and that this freedom is abused by many students to spend more time on things that are not related to their subjects such as social media, games and online news. The fact that the students open multiple windows and have perfected the skill of switching with the speed of light between non-academic windows and the academic one(s) on their screen when the teacher is near, makes it very difficult for the teacher to keep track of what the students really are doing. Blikstad-Balas' study shows that the "abuse" often happens when the students are supposedly paying attention and taking notes during a lecture on the whiteboard, while the amount of time spent on entertainment somewhat drops when the students are given freedom to work on their own. Blikstad-Balas was surprised by the extent of abuse and points out that "As all students in upper secondary school have access to a laptop at school, the challenge is massive". Many teachers think that it is not the teachers' responsibility what the students choose to spend their time on when in class, but rather the students themselves. Others disagree. One of them, Kjell Inge Bråtveit, principal at Skudenes Lower Secondary school, thinks that letting the students decide for themselves what their time should be spent on is a sign of lack of class management. At his school the pupils' cellphones/Smartphones are confiscated before class every day (Ertesvåg & Sandblad, 2014). Students at Ulsrud Upper

Secondary School agree that good classroom management can limit the time wasted on entertainment during class for instance by switching off their access to their school's Internet for a certain period of time (Slettholm, Svarstad, and Færaas, 2014, p.6). The teachers in Hordaland have the same opportunity to block Internet access for a limited period of time through the program called Tigru. The drawback is of course that this cannot be done whenever the students are required to search the net for information, use online programs such as working on online textbook sites and tasks. Smartbooks, such as the Skills-series from Gyldendal, can be downloaded and used offline to some extent, though many of the interactive tasks will not work when offline and the Smartbooks therefore become a less valuable teaching tool if used offline. (Information on the Smartbook series can be viewed on http://podium.gyldendal.no/skills, although full access will require a valid lisence).

The National Centre for ICT in education supports the view that this is a question of class management and is sceptical to limiting the pupils' network access. Director Trond Ingebretsen understands that this is challenging for many teachers. He does, however, recommend developing good classroom management rather than restricting access, though states that as a part of this management one should make the students put away their laptops when they are not needed. He believes the focus must be on how technology can promote learning, rather than on how the PC interferes with teaching (Slettholm, Svarstad, and Færaas, 2014, p.6).

The teachers' union, Utdanningsforbundet, carried in 2012 out a survey which confirms that having laptops and Internet access in the classroom is a challenge and that students waste a lot of time on non-curricular activities. 94 per cent of upper secondary teachers at general studies agreed that Internet usage during class disrupts teaching to some or a large degree. At the same time 76 % of the teachers state that the PCs are an important or very important tool for the students. 94 per cent of the participants in the survey stated that they thought that Internet browsing, games and the use of social media during class, is a widespread phenomenon, and that this significantly affects the concentration and learning outcomes for students (Utdanningsforbundet, 2012). Mimi Bjerkestrand, the union's leader 2010-2013, claimed that the use of computers in schools had not been thoroughly thought through and called in 2012 for a conscious strategy for the use of PCs and the Internet to support teaching at school. 94 % of the teachers stated that they wanted to a greater extent be able to restrict students' access to the Internet in all or part of teaching time (Ansteensen, 2012).

### 2.5.3 The authorities' view on teachers, students and social media

Research has shown that many pupils and students waste a lot of their time in class being entertained on Internet. Social media has been a favourite and Facebook in particular. This has led to a need for the authorities to clarify what is and is not allowed during class and also sometimes outside class. In Mandal local authorities have actively put a clear ban on teachers and primary school pupils becoming Facebook-friends pointing out that Facebook does not allow children under the age of 13 to set up an account (Murtnes, 2011). Skog's previously mentioned research shows that a ban most likely is necessary if such Facebook-friendships are deemed undesirable. In a national survey carried out by Respons for the teachers' union, *Utdanningsforbundet*, the teachers agreed with the authorities in Mandal: 87 % of the teachers said that teachers and pupils/students should not become Facebook-friends (Utdanningsforbundet, 2012). In addition, local authorities in Mandal points out that the schools should not have to be associated with accounts with false profiles, as false profiles are a necessity in order to set up an account when still under 13. For the lower secondary pupils, the authorities have not put a ban on teacher-student Facebook-friendships but rather advised against them claiming that there can be several adverse circumstances if teacher-student relationships should be mixed with the private ones. The teachers are reported to having been positive to the ban and advice against Facebook-friendships with pupils. It is worth noticing that in neither of the two mentioned examples teachers who used Facebook in their teaching, Berit Skog and Liv Marie Schou, had accepted friend requests from their students either.

Professor Krokan, on the other hand, thinks that that is exactly what the teachers should do, though that the teachers maybe should have another profile than their private one for contact with students. He claims that as a minimum the teachers should "attempt to design some form of digital learning. For example, introducing a blog task, reflect on anything, write and comment on each other's posts and link to each other's material". Alf Andersen, principal at Greåker High School in Sarpsborg, supports Krokan's view, adding that "We actually have a huge problem in connecting with the young" (NTB, 2011).

Some cases of teachers themselves making wrong moves on Facebook have hit the headlines of various news media might have made teachers who were thinking about using Facebook or other social media in their teaching reconsider. One example might be the teacher who lost his

-

<sup>&</sup>lt;sup>5</sup> My translation

<sup>&</sup>lt;sup>6</sup> My translation

job due to among other things, writing posts referring to the Utøya mass murderer in positive terms; though he later claimed the posts were intended as a joke. This was done on the teacher's private account, but the posts were read by and complained upon by concerned parents and fellow citizens in his local community (Nilsen, 2012). This case raises questions about teachers' freedom of speech as well as whether there are, should be or can be a distinction on social media between the private person and the professional teacher especially given that the teachers are the students' role models.

#### 2.5.4 Local authorities and social media

Hordaland County seems to be among the lovers of social media. Both the county administration itself and most of its schools are on Facebook, such as for instance Laksevåg, Sotra, Os and Knarvik. New teachers are met with a list of demands regarding personal digital competence on the site Learning in Hordaland/laringihordaland.no, which is discussed in more detail in section 2.6.2. The site among other things promotes the use of Facebook in the classroom: "Student collaboration and continuous assessment? Co-operating and sharing with colleagues? Better distribution of information [...]? Facebook can be an effective tool on several levels."(HFK/Læring i Hordaland, 2016c) Online College is suggested as a source of inspiration suggesting 99 ways to use Facebook in the classroom (Online College, 2012). There is also a link to a blog about how to use Facebook in the classroom claiming "Sharing is the new way of learning". The blogger, Marianne Hagelia at Volda University College, argues that "Facebook is the students' infrastructure - they have an "always-on" learning style. Raised in and "always-on" world, students today have different expectations and learning styles than previous generations. The ubiquitous use of social and mobile technologies gives teenagers an unprecedented opportunity to use tools like Facebook to create self-organizing learning communities or Personal Learning Networks." On the blog, multiple ideas for using Facebook for educational purposes are presented as encouragement (Hagelia<sup>7</sup>).

On their intranet page, Hordaland County has published general guidelines for setting up a Facebook page representing a part of their organization. These guidelines were last updated in July 2011 (HFK/Innsida, 2011). In the guidelines it is pointed out that one must have a clearly defined goal for the page as well as ensure that one has the necessary resources to update the

\_

<sup>&</sup>lt;sup>7</sup> No date found for blogpost

profile continuously. It is also underlined that all of the county's employees using social media for work need to remember that he or she then represents the county and should act accordingly. The employees are also warned that even though they write on social media as a private person, others might perceive them as representatives for their workplace. The principals have been given the responsibility of giving approval to set up Facebook pages linked to the county's schools. Similar guidelines are included in the county's ethical guidelines for people working for the county, e.g. teachers. In the guidelines there is a separate section on digital platforms and social media where it is emphasized that the county's accounts on social media should only be used to express the county's official views and not private ones. In addition, it is clearly stated that employees should keep their role in the county in mind when on social media on their private accounts. In the guidelines there is also a demand for the employees to clearly state when they speak on behalf of themselves and not the county when expressing themselves "in media, to a third party, etc.", though this should not limit the employees' freedom of speech (HFK/Hordaland<sup>8</sup>).

Many teachers are still strongly opposed to students having access to Facebook while at school demanding that the county should let schools and/or teachers block the site from access on the school's network. The county has not allowed this. Though Hordaland County both allows for and seem positive to social media being used in the classrooms, the participant teachers in the present survey expressed both scepticism and criticism. Their views will be further discussed in chapter four.

### 2.5.5 New tools in Hordaland County 2015/2016

Two sets of new tools have been introduced during the schoolyear 2015/2016, i.e. after the survey this thesis builds on was carried out. These are likely to change how and what kind of digital competence is promoted in the county. One change is that all teachers and students are given access to GAFE, Google Apps for Education. These are applications which exist completely online (i.e. everything is automatically saved in the cloud), which means that all creations can be accessed at any time from any device with an Internet connection. These applications are likely to make online communication and collaboration easier for both teachers and students. One of the benefits with GAFE is that teachers and students can share documents. Teachers can therefore access, view and comment on students' work while it is still in progress, rather than wait for a draft or final product to be handed in. In addition, there

-

<sup>&</sup>lt;sup>8</sup> Due to HFK updating their pages the link is currently deactivated, deleted or has been moved.

is a log which makes it visible to the teacher who does or has done what when e.g. students work in groups. Access to GAFE raises two questions. The first one is whether or not teachers and students will start using it, Secondly, if the students and teachers start sharing documents, will the teachers' open and constant access be viewed as only a benefit by the students or will they feel suffocated and demotivated by continuous surveillance?

The second change involves the way exams are carried out. Earlier all Internet access was banned on the day of the exam, although it was allowed during preparations. This year the county has allowed seven web sites to remain open during the exam (see appendix VIII). This might be a first step towards allowing full Internet access during exams.

## 2.6 Hordaland County and the digital revolution

### 2.6.1 The lay out of the organisation

The introduction of K06 required some alterations to be made to the organisation of the county as well as the setting up of some new positions. Hordaland County has sorted its upper secondary school into 6 geographical regions lead by one e-Pedagog each. The title e-Pedagog is identical to the Norwegian one. Even though "pedagog" has negative connotations in British and American English, the title will be used here and is, as far as I know, also the title used elsewhere. The e-Pedagogs lead the digital development work and cooperation between the schools in their region. Occasionally joint meetings and courses for teachers are held. In addition, webinars are arranged and flipped classroom videos explaining how to use common software are published. Which subjects are covered and what competence is promoted in these courses, webinars and videos, will most likely have influenced the teachers' perception of both what is required as well as what is important to learn and teach regarding digital competence.

In addition, each school should also have at least one e-Leader, one e-Coordinator and, as a minimum, one ICT Consultant. The e-Leaders work with the school's management to realise plans set up by the county and the school itself. The ICT Consultants deal with practical problems with machines and software as well as advice on matters involving ICT. The e-Coordinators' work is led by the e-Pedagog in charge of the given area. Some schools have provided further support for their teachers and students: some have Super Users who instruct teachers individually or in groups on how to use relevant software and platforms as well as help teachers when they run into problems with these. A few schools have in addition tried

appointing Student Super Users. This gives the following layout of the organisation's ICT "promoters":

6 e-Pedagogs

1 e-Leader at each school

Super Users (some schools)

Student Super Users (some schools)

Figure 1: The ICT "promoters" within the county

One of the schools which are trying out Student Super Users is Austrheim upper secondary school where they started a project in August 2015 selecting some students to become Student Super Users (*elevsuperbrukere*). In their description of the project they claim that many students do not have the digital skills necessary in everyday school life: Teachers had found that their students did not always have sufficient expertise in using Office software and it was claimed that this prevented work and learning as the students, in order to get the necessary help, often had to leave the classroom and therefore missed out on parts of lessons. In addition, there had been a lot of pressure on the ICT Consultant and e-Coordinator to help a lot of students often with the same basic operations.

The objective was and is therefore to expand and increase the students' basic digital competence and provide Student Super Users with different courses to increase their basic digital competence. This competence is to be passed on to their peers, and the Student Super Users are to use their competence, when needed, in the classroom to help their fellow students as well as help each other if one of them fails to assist a peer. Student Super Users should thus learn from each other as well as report any training needs and challenges students may have regarding ICT to the school's ICT group. With this project they want to examine whether there is greater learning outcomes among students if they have a Student Super User to deal with and thus learn from peers instead of the ICT Consultant / e-Coordinator. It is also hoped that a few obstacles in computer usage in schools will be removed and that the students will become resources for one another (HFK/Læring i Hordaland, 2016b).

The view that students should be taught by students on digital matters is not a new one. A similar, but possibly somewhat more extreme view, is championed by Nichole Pinkard, who has been called a digital missionary by the Chicago post. She is an Associate Professor in the College of Computing and Digital Media at DePaul University in Chicago and founder of

Digital Youth Network and claims that the gap between the digitally native students and the digitally immigrant teachers is too wide and that the students should in fact not be taught digital competence by teachers but rather by true natives: "we realized that so many efforts around the tech-integration in school had failed mainly because the purpose was to try to get teachers to be the ones who taught kids how to use technology. And we just knew that could not be the way to go [...] because our kids were more digitally sophisticated than teachers" (Pinkard, 2013). According to Pinkard, more or less all instruction on digital matters should be left to peers, while at Austrheim basic competence is left to the peers giving the teachers more room for focusing on the pedagogical use of the tools. Whether or not the individual school has Super Users and Student Super Users, the county has made great efforts setting up an organisation to provide practical help with digital problems as well as developing the teachers' competence within the area.

### 2.6.2 Learning in Hordaland (*Læring i Hordaland*)

An important source of information on what the county has chosen to focus on is the website called www.laringihordaland.no (Learning in Hordaland), previously known as www.digitalskule.no. The site was set up by the county's educational authorities represented by the e-Pedagogs. On itslearning there is even a direct link to the site and it should therefore be easily accessible for the teachers given that they notice the button.

The earliest version of this site was set up and edited by the then epedagog Roy Eide and called www.vgl.no. Even though www.vgl.no has been replaced by www.digitalskule.no, which is directly linked to the current site www.Laringihordaland.no, the link was still accessible the time of writing this thesis and it may therefore still be in use. These sites were and are aiming to reach two sets of audience: the students (digitale elever) and the teachers (digital grunnkompetanse for lærere). The required digital aims for both teachers and students in Hordaland County are listed. Ready-made surveys aiming to reveal to what extent these requirements are met as well as what sort of courses should be offered, are published here. They could be and have been used by various schools to varying degrees. It is likely that by answering such surveys repeatedly, supposedly once a year, the teachers formed an impression of what digital competence was supposed to involve.

Laringihordaland.no is a product of collaboration between the upper secondary schools, e-Pedagogs, and the county's educational authorities and is today a site for among other things sharing educational development projects in secondary schools in Hordaland, including the Student Super User project at Austrheim Upper Secondary School. These projects focus on how ICT can contribute to better learning and are to be included in the individual schools' overall plan for development. Participant schools may apply to the local authorities, represented by the Department of Education and Training, for financial and technical support for the development of the projects which may involve the students, the teachers, the school management, the ICT consultants, the librarians, etc. at the schools.

The projects are to be published on this site as information and inspiration for other schools. It is, however, difficult to search projects that involve English as a subject. The reason for the poor search ability based on school subject involved is possibly that the projects are supposed to be relevant for many subjects and include and inspire cross curricular projects. The information on ongoing and previous projects are instead sorted and can be searched based on a long list of various types of pedagogical focus such as class management, learning environment, flipped classroom, collaborative learning, study techniques, assessment etc. Full list has been provided (in Norwegian) in appendix VI.

Focusing on basic digital competence is important to ensure that the student/apprentice, teacher and school owner is competent to use digital tools for schoolwork and in the learning process. Information and guidance on these webpages cover the most important tools and resources that teachers in Hordaland County must have knowledge of. The overall objective of this effort on basic digital competence is better learning and implementation through better exploitation of digital aids (HFK/Læring i Hordaland, 2016a). This objective is in accordance with the goals of the steering document, "Styringsdokument for det pedagogiske utviklingsarbeidet ved dei videregåande skolane", which will be discussed later in this section.

### 2.6.3 Mapping and monitoring digital competence

Each school should map and monitor their employees' basic digital competence regularly. This is to get an overview of any training needs and individual wishes and goals. The schools are advised to use the survey developed by the ePedagogs and the Department of Education and Training (in Hordaland County). The survey is offered in the three different versions: Word, pdf, and itslearning questionnaire. The most current version of the survey can be viewed on www.laringihordaland.no/wp-content/uploads/sites/17/2014/10/Digital-grunnkompetanse-generell-kompetanse-2016-mars.pdf. The latter version is directly linked to resources on the Learning in Hordaland web site under basic digital competence. By

following the links, the participants can view flipped classroom videos or written instructions with screenshots on topics they wish to know more about.

When answering the written versions of the survey, the participants are given two options when answering the Word/pdf version: "I know" or "I need help". One might question two things in this respect: Firstly, why would the schools want/need printable versions of the survey, and secondly, why there is not a third answering option: "I do not need" as not all of the listed requirements are relevant for all teachers. The answer to the first question might have something to do with digital immigrant school leaders, while the missing alternative answer in the questionnaire has been added in the digital itslearning version of the survey. Being able to use Skolearena is given top priority to ensure that the students' track record of absence and behaviour is kept up to date and correct. Second priority is managing the learning platform, itslearning. Netiquette is also covered in the survey: It is stated that it is important to learn how one can find and use information. Moreover, one must know how one can publish information on the Internet and communicate with others in a positive way. Evaluating sources, stating them correctly and handling plagiarism are all mentioned as well as managing passwords. As this information requires a password to be accessed on the county's intranet, a screenshot of the complete list of the requirements under netiquette has been included in appendix VI.

Some technical knowledge is also required of the teachers as they need to have control over their own computer and be familiar with support programs to utilize machine optimally. MS Office is given a separate section in the survey. The teachers are required to master Word, PowerPoint, OneNote and Outlook at a level that makes the software functional in teaching. The county has also since August 2015 provided Google apps for education for all employees and students, and these tools can be used for digital interaction, cooperation and evaluation. The teachers are therefore required to know the basic Google tools and use them. Finally, there are two open questions where the teachers have to comment on basic digital competence and say what within this subject they personally aim to improve on/learn more about (in the near future). The answers to the survey are made available to the teachers' immediate superiors for these to be able to manage and prioritise when it comes to digital development within a department or a school.

### 2.6.4 Students' digital competence according to the county

Each school has a responsibility to ensure that pupils have digital skills so they can exploit digital tools to increase learning outcomes. The schools are encouraged to ensure that the students acquire basic digital competence as early in the schoolyear as possible. Therefore the ePedagogs in Hordaland yearly update a PowerPoint presentation the schools can use at the beginning of the schoolyear to teach student this basic digital competence. First year students are to be given priority. It is not stated who at the individual schools should hold this presentation. Topics covered ranges from how to buy a subsidized computer, get access to the school's network, what software to download from where and how, where to store files safely, warnings that the computer may be a time stealer (naming Facebook, music, films, gaming as potential "threats"), how to use itslearning and Skolearena, keeping your passwords safe, dealing with bullying and plagiarism, etc. Though the information may be regarded as (very) useful, one may question how efficient and effective going through the presentation will be, whoever presents it, as the current version is 46 pages long (HFK/Læring I Hordaland, 2016d). Having listened in on one or more of these presentations or having held it themselves might have influenced the English teachers' understanding of the term digital competence.

### 2.6.5 Dei Gode Døma/The Good Examples

Dei Gode Døma, which translates into "The Good Examples", is a two day conference which is held in March every second year. (The first few years it was held every year). Each time around 10 percent of the teachers in Hordaland participate together with many school leaders. The good examples of ICT used in the classroom are presented by the county's own teachers and students as well as a few external ones, and relevant external lecturers and suppliers of equipment are also given room to present (Breivik, 2015, p 64). The presentations are held mostly in parallel-sessions and one can select the most relevant ones, usually based on subjects involved. In many cases the presentations provide more or less ready-made plans and techniques that the teachers can copy and apply the very next lesson. It is also intended that the participant teachers should bring their newly acquired knowledge and skills back to their schools and pass it on to those who were not fortunate enough to attend the conference. What is presented at this conference may therefore be highly influential on classroom practice.

\_

<sup>&</sup>lt;sup>9</sup> For overview of program and sessions for the most recent conference March 2016 see www.deigodedoma.no).

### 2.6.6 The Steering Document

The steering document describes the strategic priorities made by the county for a two year period and is part of their evaluation system. The priorities are based on status reports which are produced regularly. The steering document most relevant at the time of the survey is the one for 2013-2015 which was built based on an evaluation from 2012. This steering document states that there is a need for the students and teachers to become more involved in their school's plans for development and in carrying them out. The main goals for the years 2013-2015 were increased learning output and increasing the number of upper secondary students completing their education within the given five year period. All activities at the schools should be aiming to support these goals and the focus should at all times and at all levels be on what the students are to learn, what they have learned and finding solutions when these goals are not reached. All development plans the individual schools make should be in accordance with these goals (HFK, 2013, p.1).

In order to reach these goals three areas were to be focused on especially:

- Class management
- Evaluating to learn
- Use of ICT in the learning process

These areas were also focused on in the previous two year plan, the areas are interdependent and the individual schools choose for themselves how to work within these areas and which parts should be given priority, though it is made clear that all schools have to prove that systematic work is done in order to develop competence within practical and pedagogical use of ICT and how the use of ICT promotes the students' learning.

# **Chapter 3: Methods and Material**

### 3.1 Introduction

The aim of this chapter is to present and discuss the methods used to collect and analyse data for this research project. The collected data provides the basis for the discussion of the research questions, and the methodological choices must therefore contribute to data and results of a high level of reliability and validity. The methodology as well as the choice of instrument and selection of participants will be presented in section 3.2. Section 3.3 will focus on the reliability and validity of the results. The design of the questionnaire that was used will be described in section 3.4. Prior to the full scale survey involving teachers from many of the county's schools, a pilot study was carried out where teachers at only one school were invited. This pilot study and the main results of this will be commented on in section 3.4.2 as it was part of the work done to prepare the full scale survey. How the findings will be analysed and presented will be discussed in section 3.5 and the strength and limitations in section 3.6. Finally, in section 3.7, ethical concerns will be examined.

### 3.2 Methods

In research there are two main approaches: qualitative and quantitative research. These are often seen as opposites. Oxford dictionaries suggest the following definition of *quantitative*: "Relating to, measuring, or measured by the quantity of something rather than its quality". (www.oxforddictionaries.com) Quantitative research usually produces findings that are expressed through numbers, statistics and other kinds of measurement. The findings in qualitative research are then expressed in other ways, although defining the term is difficult. In the preface to Gibbs' *Analyzing Qualitative Data*, Flick states that "It has become more and more difficult to find a common definition of qualitative research which is accepted by the majority of qualitative research approaches and researchers" adding that it is "no longer just simply "not quantitative research", but has developed an identity (or maybe multiple identities) of its own". (Gibbs, 2007, p.X)

ORCA, Qualitative Research Consultants Group, suggests the following definition:

Qualitative research is designed to reveal a target audience's range of behavior and the perceptions that drive it with reference to specific topics or issues. It uses in-depth studies of

small groups of people to guide and support the construction of hypotheses. The results of qualitative research are descriptive rather than predictive. (QRCA, 2016)

In the present study the target audience have been upper secondary English teachers and the range of behaviour studied has been the way they design their lesson plans. In the study mixed methods have been employed; a questionnaire containing both open and closed questions has been combined with (the possibility of) follow-up questions though a chat on a messaging-system. This was carried out over the learning platform used in the county provided by itslearning. While a questionnaire with closed questions is most often associated with quantitative research, one may combine this method with the other methods, which are clearly linked to qualitative research. Here the closed questions have been combined with open-ended ones as well as the possibility to follow up in an online chat. The chat shares some characteristics with methods involving interviews. By means of the closed questions background information about the participants was collected and this was used when analysing the open ended questions. The opportunity of follow-up questions via a chat was included in order to be able to clarify potentially vague responses in the questionnaire.

#### 3.2.1 Choice of instrument and some of its limitations

To gain insight into the teachers' understanding of the term digital competence and how digital competence is promoted in the classroom, the participants were asked to fill in an online questionnaire requiring them to among other things define the term as well as outline an example of a 90 minute lesson-plan which they thought promoted their students' digital competence. In addition, they were asked to supply background information about themselves (e.g. gender, program they teach (vocational vs. general studies), years of teaching-experience, etc.). During the collection of these data the participants were *not* offered full anonymity, i.e. their contact information would be available to the researcher but not to anyone else. This alternative was chosen in order to have the possibility of asking them follow up questions through the messaging system if deemed necessary. This limited anonymity also meant that the researcher gained an overview over which schools were represented among the participants.

One of the reasons for the choice of this instrument was that it would force the participating teachers to formulate their answers in writing. In doing so it was hoped that they would reflect more deeply on their responses creating an effect similar to that Graham Gibbs claims writing does for researchers:

Writing is thinking. It is natural to believe that you need to be clear in your mind what you are trying to express first before you can write it down. However, most of the time, the opposite is true. You may think you have a clear idea, but it is only when you write it down that you can be certain that you do so (or sadly, sometimes, that you do not). Having to communicate your ideas is an excellent test of how far you have a clear understanding of how coherent your ideas are." (Gibbs, 2007, p.25)

As a consequence and fringe benefit of participating in the research, it was therefore also hoped that the participants might take a closer look at their own knowledge and praxis and possibly improve one or both, i.e. that the survey itself might help promote digital competence. An alternative way of collecting data could have been interviewing the participants individually or in groups about the same topics. However, asking them to write their answers themselves, rather than transcribing what they say in interviews, means there is no need to change the medium, and in addition, helps "avoiding the pitfalls of transcription" (Gibbs, 2007, p.11). By letting the participants express themselves in English; potential translation errors are also avoided as the participating teachers should be both comfortable with expressing themselves in English as well as be in possession of the competence necessary to do so.

When selecting a method of research, it is important to ensure that the chosen method will collect data that may provide relevant and reliable answers to the research questions. However, one must also take into consideration what is practically possible to do in real life within the given framework regarding for instance available time and resources. The given framework for this survey was for instance limited by time and money. If face-to-face interviews had been the chosen method of data collection, it would require both time and money to travel in order to visit a selection of schools. The geographical spread of schools would have to be limited. This limitation was avoided when an online survey was chosen instead. In addition, both the participants' and the researcher's teaching schedule, which could (and still can) be changed at a fairly short notice, would become a challenge as this potentially continuous change of schedules would affect availability of potential participants. Again, an online survey solves the problem. If it is not practically possible to use a preferred method, it is not an option however good the method may seem in theory (Bell, 2010, p.118). Tjora argues that in addition to ethical considerations, efficiency in the collection of data is among the most important factors. The chosen method must collect relevant and reliable information without the researcher's or the participants' time and resources being wasted. (Tjora, 2010,

p.13) By using itslearning both the participants and the researcher were less limited by time and space as a questionnaire on the web can be answered anywhere at any time within a given deadline as long as one is online. This was an attempt at creating a low threshold for answering the survey, but on the other hand "limitless" access gave potential participants the opportunity to decide to fill it in "later" and thereby postponing it beyond the deadline.

Not having to spend time travelling, booking time for interviews, dealing with changing schedules and spending time transcribing and possibly translating interviews, also meant that contributions from a larger number of participants could be included and therefore a broader picture could be painted compared to an in depth analysis of a few contributions. To reach the potential participants in an efficient manner, itslearning became the chosen medium of communication. The foreign language site administrators in Hordaland County were asked to give the researcher access as an administrator on their site. This was granted and meant that the researcher was able to both publish the questionnaire on the site as well as select who would be allowed to read the results (i.e. the researcher only). A questionnaire on this site was therefore chosen as the instrument for collection of data and the itslearning messaging system for the follow up questions. However, as only English teachers in upper secondary schools run by Hordaland County have access to this site, it meant that teachers at privately owned schools such as Akademiet, BPG (Bergen Private Gymnas) and Sonans could not be included in this research. As the teachers at these schools are not employed by the Hordaland County and have therefore not received the same information and training in digital competence as those who are, their participation in the survey was seen as neither necessary nor relevant.

### 3.2.2 Selection of participants

How many replies to expect or hope for, was nearly impossible to estimate or even guess. The number of upper secondary English teachers in Hordaland County turned out to be unknown: no-one has an overview of how many people have taught English at the relevant schools over the past few years and the number of current English teachers keep changing with people falling ill, taking out leave, having their schedules changed, resigning, etc. The only indicator that was found was the number of people who have access to the Hordaland foreign language site on itslearning, but even this number varies over time. Normally there were around 530-550 people with access at any given time during the period the survey was carried out (December 2014-February 2015). However, this number also includes teachers of other foreign languages who were not relevant as participants. The participant list on itslearning

provide the opportunity for the members to fill in information about themselves, such as which subjects they teach. However, very few of the members had filled in this information, and for the ones that had, there is a chance that this information is outdated. As a result of this, there were no practical way of sorting them and thus target potential English teachers to participate in the survey. For that reason a general invitation including information on who were relevant participants was published on the site.

Given the uncertain number of potential participants, there were, prior to publishing the questionnaire online, worries about what to do if too much material was provided, e.g. which criteria for selecting which participants should be included if very many participants provided a great deal of material. Background information was asked for (gender, years of experience, and type of classes taught) and this information was intended to be used to categorise the answers. The attempt at this kind of categorisation will be commented on in section 4.8.

The main concern was, however, to get enough teachers to volunteer. It was thought that asking teachers to allow another teacher insight into their professional knowledge and personal praxis might be perceived as scary by many. Hence, it was feared that they might resist taking part resulting in there being too little information to work with. According to Tjora, not getting enough participants seems to be a common problem (Tjora, 2010, pp.128-140). As few participants turned out to a concern in this survey, some measures were put in place to try to get more teachers to take part. Potential participants were repeatedly encouraged to take part via posts on the HFK foreign language page on itslearning as well as reminded at lectures arranged by the county for the these teachers. In addition, the principals of schools that were not represented among the participants were sent emails encouraging their school's teachers to take part. This resulted in a handful more replies.

# 3.3 Reliability and validity

Gibbs states that findings are valid "if the explanations are really true or accurate and correctly capture what is actually happening". They are "reliable if the results are consistent across repeated investigations in different circumstances with different investigators" and "generalizable if they are true for a wide (but specified) range of circumstances beyond those studied in the particular research". (Gibbs 2007, p.91)

The collection of material was done by means of a questionnaire filled in by the teachers themselves in the language the thesis would be written in. This was, as mentioned, partially

done to avoid potential transcription and translation errors. The participants should be comfortable with expressing themselves in English as they have studied the language for a year or more at university or similar level and use the language regularly when teaching it to upper secondary students. The chosen method for collecting the material should therefore accurate in the sense that the material is in the participants' own words. Whether or not the responses are "true" and capture what is actually happening in the classrooms might be questioned, as there truthfulness of the teachers' descriptions of their previously used lesson-plans have not been checked and the lessons have not been observed by other people than the teacher in question and his or her students. By locking the teachers' screens during the answering of the questionnaire and their identity not becoming known to others beyond the researcher, might have reduced their potential urge and opportunities of "improving" their answers. It is therefore reasons to believe that the provided answers are valid.

How trustworthy the data is, is closely linked to how the data is collected. The initial plan of collecting and analysing quantitative data was abandoned when producing useful closed-ended questions proved difficult. The challenge was to ask closed questions without strongly influencing the participants by more or less giving them hints of what the relevant answers might be: a multiple choice task would limit the number of potential answers as well as provide the participants with opportunities of making "educated guesses" as to the correct answer among the alternatives. It also turned out to be difficult to come up with closed-ended questions that would provide insight into the teachers' lesson plans. As the use of closed-ended questions might reduce the reliability of the findings, a qualitative design with open-ended questions was chosen, allowing the participants to "voice their experiences unconstrained by any perspectives of the researcher" (Creswell, 2010, p. 218). I believe this to be suitable design as I wish to explore what Creswell (2010) calls "variables [I] could not predict beforehand". (p.16)

Using itslearning to collect information may reduce the chance of getting answers from teachers who themselves have low competence in using computers and/or the platform resulting in a wrong image of what the situation really is. However, as itslearning is the platform the local authorities have decided teachers should use on a daily basis and which teachers have been trained to use over several years, it is fair to assume that the large majority of the relevant teachers are fully capable of filling in a questionnaire or answer a quiz on itslearning.

The itslearning quiz programme called "Test 2.0" includes the option "Testmode" where one can "lock" the participant's computer screen to the test until he/she finishes or quits. This option was selected for this survey. The price to pay for choosing to use Testmode is that potential participants may have decided that writing the whole answer then and there was too much of an effort/they do not have the time/etc. and therefore have chosen to quit the test without finishing. As they did not have the option of taking a break and logging back on later, there might be a higher risk that some potential participants were lost during data collection. However, if an ordinary itslearning questionnaire had been used, the participants would have the possibility of opening another window to search for the "correct" answer to i.e. a definition of digital competence. Teachers will, in my experience, have a higher tendency than most people to automatically look for the "perfect answer", e.g. by googling it. In this context looking up the answer would have to be considered an error as the point of asking for a definition was to gain access to the participants' prior knowledge of the term and not his/her skills in using Google. Locking the computer the answers were submitted from did however not prevent the participants from using another computer nearby, his/her smartphone to google the answer or asking someone around them. It is hoped though, that by using Testmode, the chances of material from other sources than the participants' prior knowledge having been collected have been strongly reduced and thereby having increased the reliability of the findings.

As there is a high probability that the teachers' definitions of digital competence have been collected without the teachers looking the term up before answering, it is likely that the findings have provided a good basis for answering the first research question. When it comes to the second research question, the use of "Test mode" also prevented participants from being able to copy existing lesson plans they had used, and thus they were forced to reproduce them from memory. This may have led to errors as the participants may have remembered incorrectly or may have (unconsciously) decided to improve their "image" by making up "better" lesson plans than what they have really used and therefore contribute to painting a false picture of their praxis.

Although there is a well-known and strong dislike and distrust of the Testmode programme among some teachers due to earlier problems with downloading, opening and exiting the programme, and conflicts with other programmes such as Smartboard and Skype, these problems were solved by the programmers involved prior to the survey being carried out. It is

therefore a fair assumption that the benefits of using it outweighed the risks of not getting enough participants.

## 3.4 Designing the questionnaire

### 3.4.1 The Questions

The three first questions were closed questions (i.e. with a fixed set of alternative answers to choose from) due to the nature of the questions. The first two questions (see appendix III) required the participants to confirm that they had read the information on the front page and further asked them to give their consent to taking part in the survey. The answers to the third and fourth questions would make it possible to sort and compare the findings based on gender and how experienced the teachers were, given that enough answers were obtained. The fourth was designed as an open question in order to postpone the decision of which categories might be useful to apply until after the collected material was known.

The fifth question was included to double check that the participants have in fact taught English at the relevant courses recently (though it is clearly stated on the front page of the questionnaire that those invited to take part in the survey were those who have taught the courses during the past two years). The relevant options were: VG1 General Studies, VG1/VG2 Vocational studies or a combination of these. The reason for limiting the study to teachers who have taught these kinds of classes during the past two years was that if the participant had not been teaching the English curriculum in question fairly recently, he or she might not remember very well what they used to do in class and the reason for their choices. His or her answers to the rest of the questions would therefore most likely not be reliable.

The sixth question asked the participants to list the basic skills described in the Knowledge Promotion. It was included to find out how many of the basic skills the participants knew of as well as to find out whether digital competence would be mentioned without any prior hints. The wording of the invitation on the front page was chosen with this in mind. The sequence of the questions was also carefully arranged so that the researcher's use of words and phrases would not be the reason why the participants thought of digital competence or chose to list a particular number of basic skills: e.g. the wording did not give the participant any clues as to how many basic skills are listed by the authorities. As a specific number is not mentioned, one might have expected the participants to list the ones they had "on the tip of their tongues" rather than be thinking long and hard to remember any "missing" basic skills in order to get

their answer right. As quite many years have passed since the introduction of the Knowledge Promotion and the basic skills have repeatedly and in a lot of contexts been referred to as the *five* basic skills, one might assume that quite many participants would attempt to list five skills, whether those were the same as listed in the Knowledge Promotion or not.

Questions 7, 8, 9 and 10 are the central part of the research. On question 7 the participants were asked to define digital competence, on nine to provide a lesson plan and then on question 10 to comment on their choices in the lesson plan. Question 8 was a closed question. Here one might have expected to find a scale with five options or degrees to choose from, but for practical reasons three alternatives were given for how often the teachers took the students' digital competence into consideration when planning their lessons: regularly, sometimes and no (meaning never). It was not deemed necessary to have more alternatives as for instance "always" would be a rather unlikely answer given the competence aims in the curriculum and it would be highly impractical having to use or consider using digital tools in all settings. A finer distinction than "sometimes" and "regularly" was not considered to be necessary or relevant in this research. Finally, the participants were encouraged to express any comments or thoughts they might have regarding the questionnaire. This final question was included to discover any misunderstandings due to choice of words in the questionnaire. It also provided the participants with an opportunity to comment on previous answers they felt were incomplete as they were only able to move forward after clicking "send". This question also allowed for the participant to comment on things the questionnaire did not, but maybe should have, asked about.

### 3.4.2 The pilot study

Prior to the full scale survey on the county's language site on itslearning, a pilot study was carried out on itslearning only giving the English teachers at one school access. The pilot study was an attempt to reduce the risk of the open-ended questions giving room for misinterpretations. The results of the pilot study provided an opportunity to modify the questions, if deemed necessary, before the full scale survey was carried out. Initially, the pilot study was intended to take a few weeks to complete as it was expected that some participants would need a reminder or two for them to remember to fill in the questionnaire. It was estimated that on average it would take about 10-15 minutes to complete the survey, depending on how much thinking was required as well as how fast the participant could type.

It turned out to be difficult to get enough participants. The first attempt in June 2013, resulted in one reply. By New Year another seven had provided their replies, though many of them did not answer all the questions in the survey making it quite difficult to assess whether the questions were interpreted the way they were intended or not. Two potential participants had admitted, when asked face to face, that they had started answering the survey, but had logged off without completing it because they "felt stupid" or embarrassed by not being able to answer what they considered to be "basic questions" within their own field of work. It also turned out that the at that time, the most recent update of the program removed the opportunity for the maker of a survey to see who had started answering the survey without completing it. It is therefore unknown how many actually began answering the questionnaire.

Among the participants who did complete the survey, there were three men and five women. Their teaching experience ranged from four to 25 years with an average of more than 14 years. Regarding being able to list all the basic skills, six participants listed them more or less correctly. The other two participants managed two and four fairly correct ones. One in two participants "split" one basic skill into two: speaking and listening. As a result two of them suggested six "different" basic skills. One explanation for this may be that many English teachers test speaking and listening separately; "speaking skills" on presentations and "listening skills" on separate tests such as retelling (in writing due to limited time) texts that have only been listened to and not read.

All participants attempted to define the term digital competence. Some answers were supplied using "definition-sounding" phrases, while others were lists of what the students should be able to do. Seven out of eight mentioned being able to use the web for research, half the participants indicated that the students also should be able to assess the quality of the information they had found. Only three mentioned being able to list sources properly. A few mentioned being able to store information in a way that makes it possible to retrieve: be able to make folders (3), download and save (2), store in clouds (1). Only one mentioned the use of social media and one mentioned "consequences" of using digital tools. Only one referred to online tasks (e.g. text book sites). Some suggested things the students should be able to do: use Smartboard (2), make a PowerPoint presentation (4), write and upload a document (1). Only one indicated that the basic skill should be taught in accordance with the English curriculum.

When asked "Do you take the students' digital competence into consideration when planning your English lessons?", all participants provided an answer. Two stated that they considered this regularly, five said sometimes whereas one admitted "no" adding "I don't take into consideration my students digital competence because they are very familiar with finding info/ solutions on the net, even more than I...." possibly indicating that she did not feel qualified to teach her students anything new on the subject or that her students' digital skills were already good enough to meet the digital requirements in the English curriculum. When asked to provide a previously used lesson-plan one participant did not answer at all. Naturally this person also did not answer question 10 asking for a reason for the choices made in the making of the lesson-plan. The other eight filled in a lesson plan to various degrees ranging from nearly key-words to rather long descriptions. Question 11 asked for further comments and thoughts, two left this unanswered, two wished the researcher good luck with the research and the remaining five commented on things they had forgotten to say on previous questions. All in all the participants seemed to understand the questions and most of them provided useful information and therefore no changes were made in the questionnaire.

### 3.5 Analysing and presenting the findings

As mentioned in 3.2, the questionnaire included both open and closed questions. The findings of the latter, will mainly provide a summary of the background information on the participants. This background information will for practical reasons largely be presented in ways mostly found in quantitative research such as tables and pie-charts. The answers to the open questions will be presented in a manner more common in qualitative research. As qualitative research data may be difficult to analyse and present in a meaningful way and as the answers to the open questions varied greatly, discourse analysis has been used to interpret and sort the material. The answers to question 7 will firstly be dealt with collectively in a separate section comparing the findings with the definitions of digital competence that has been expressed by the authorities. Some of the definitions will also be commented on where deemed relevant in connection with the presentations of the lesson-plans.

# 3.6 Strength and limitations

The fact that the researcher is both educated as and work as an English teacher for Hordaland County, might have influenced the number of participants willing to take part in the survey. The dual role of a colleague posing as a researcher might have led to a feeling of intimidation.

It is hoped though that the participants' potential feelings of intimidation might have been reduced as information about the aim of the research was provided their anonymity guaranteed when the data had been analysed as well as in the final thesis. Letting the participants supply their information facing their computer rather than a colleague turned researcher and "expert" might also have helped lessening the feeling of intimidation.

This mentioned duality may also have affected the way participants answered the questions. They may for instance have expected the teacher-researcher to understand certain aspects without the participants stating it clearly in writing as the researcher is "in the business" and has the know-how, too. On the other hand, the interpretations of their answers might also have been influenced by the researcher's educational background and more than 20 years of teaching-experience. The answers might be interpreted differently by a person who is not an English teacher, and therefore the central material without the identifying markers have been included in appendix XI. Although the researcher's education and experience may have reduced the objectivity, the knowledge might also have been an advantage when tempting to understand the participants' answers. (Tjora, 2010, pp. 175-178)

### 3.7 Ethics

In the present chapter the methods and choices made have been presented and discussed. For each of these choices the researcher had to be aware of ethical considerations. In this study ethics is important as the participants are teachers of one subject at one level within one county and the risk of them being identified is present. As the questions asked in order to reveal how the participants understood parts of their work instruction as well as document examples of their praxis it is important that whatever misunderstandings on the part of the participants are not linked to them as individuals. Great care has therefore been taken to preserve their promised anonymity.

### 3.7.1 Getting NSD permission, informing the participants and getting their consent

To legally carry out a research project like this where information about individuals is collected, the plans for the project must be approved by the Norwegian Social Science Data Services (NSD). As can be seen in appendix I, the present research was approved by the NSD and has been carried out within their guidelines. As required, the supervisor's name and contact information was added and the material was deleted from itslearning after it had been

processed and identifying markers had been removed. The material without these markers has, as mentioned previously, been included in appendix IX.

### 3.7.2 Choice of instrument

The platform, itslearning, was the chosen instrument for collection of data for this thesis. This may be seen as problematic as the platform is both paid for and administered by the county, who is also the employer of the participants as well as the researcher. On the other hand, itslearning has already been acknowledged as safe enough for collecting and storing sensitive data about students (e.g. test-scores, grades, background information about individuals). The platform has also repeatedly been used by both the local educational authorities themselves as well as the administration at various schools for data-collection for many similar projects asking for both non-anonymous and anonymous participation. As the researcher is the sole administrator of the folder and access to the collected data required the researcher's password, the content of it was only visible to the researcher (though the individual participant could of course view his/her own contribution). The chosen instrument may therefore be considered to have had an acceptable level of security.

### 3.7.3 Informing participants and obtaining consent

Potential participants were informed about the research and the questionnaire online as information about this was published on Hordaland County's foreign language site on itslearning. The same information was repeated in the first "question" before the participants were asked to confirm that they had both read and understood the information, and they gave their consent to participate when they provided a positive reply to the second "question". As the questionnaire was designed to *not* include the opportunity of moving back to a previously given answer to change it, the participants were initially informed that they could choose to withdraw at any point without having to explain why. This they could do by either not clicking on complete or if they had completed it, by using contact information provided both on the county's foreign language site as well as on the front page of the questionnaire. Unfortunately, the choice of only allowing the participants to move forward, once and without breaks consequently also prevented potential participants from reconsidering and joining later. If they had accessed the questionnaire and (with or without intending to) quit without completing it, they would not be allowed to log back on. In the next chapter the answers from those who *did* complete the questionnaire will be presented.

# **Chapter 4: Results and discussion**

### 4.1 Introduction

In this chapter the focus will be on presenting and analysing the results from the data collection (i.e. the survey) with the research questions in mind. The definitions provided by the teachers will be compared with those of the authorities. In addition, the unedited lesson-plans will be presented in full and studied to see what sort of competence they may have promoted. Any misspellings in these quotes will therefore be the participants' own. The order of the analysis will basically be identical to that of the survey. Though this is a qualitative study, some of the material will be quantified and presented in ways typical of a quantitative study, e.g. stating percentage and/or illustrated with pie-charts.

Obtaining enough answers was as expected a problem. In the end 51 persons logged on, eleven quit without completing the survey, and 40 teachers from 17 different schools from various parts of the county completed the survey. At the time of the survey, the county had 43 different upper secondary schools. This means that about 40% of them had been represented by a contribution from at least one of their teachers. One of the replies was, however, deleted from the material and will not be part of the following statistics beyond what is discussed in the next section. The deletion was due to the fact that it was answered immediately after the survey was posted online and unfortunately before Testmode was switched on. Some of this participant's answers included (as expected) quotes and links which indicated that it would be difficult to assess whether or not the answers were "genuine" and the participant's own or googled, and were therefore deemed unreliable. A few other participants included "links" to specific sites such as "www.prezi.com" and "www.bbc.co.uk". These were not considered to be signs that the provided answers were unreliable as these addresses are fairly easy to remember and well-known by many, especially by (English) teachers.

# 4.2 Question 1 and 2

The initial two "questions" in the survey are not really questions, but requests for the participants' confirmation that they "have read and understood the information on the front page" (question 1) and that they "are willing to take part in the study" (question 2). In all of the replies that were included in the material the participants answered yes on both "questions". None of the participants have sent a request for their answers to be deleted after

completing the survey. There were, however, eleven participants out of the 51 (22 per cent) who opened and started answering the survey to some extent, but never clicked on "complete" and therefore never allowed the researcher to access their answers. Whether the incomplete forms were due to a "mis-click" on the participants' behalf or a conscious choice not to participate after all, are and will have to be unknown. This is due to the fact that they in the introduction were promised that no questions would be asked if they at any time chose to quit the survey. Not clicking on the complete button must be considered as a way of quitting the survey. One comment on question 11 by one participant might, however, indicate a reason for the number of participants "quitting" the survey and the low number of participants accessing it: "It was demanding, and therefore some people felt reluctant to participate." Such «advice» from colleagues might have discouraged potential participants from taking part in the survey and might be accountable for at least some of the eleven participants who logged off without completing it.

As mentioned in chapter 3 (section X), the exact number of English teachers in the county who have taught general studies VG1 or vocational studies VG1/VG2 or a combination during the past two years is unknown. More than 500 people were given access to the survey during the time it was accessible, but the exact number of these that were relevant participants for this study is unknown. Thus there is no way of confirming whether 51 people opening the survey is a very low number or a number one should have expected. However, based on the number of teachers who have during the past two years attended courses and lectures held in Hordaland County by the county and by textbook publishers and authors for this group of teachers, one might have hoped for more replies. What is common knowledge though, is that teachers in all lines of study are constantly and repeatedly asked to answer all sorts of internal and external surveys which might offer an explanation as to why there were "only" 40 submitted replies. Figure 4. 2 below sums up the participation in the survey.



Figure 2: Participation

## 4.3 Question 3

Question 3 in the survey required the participants to state whether they are male or female. Initially, the aim was to get enough replies to be able to sort the replies based on gender and look into potential gender-based differences. However, very few men chose to take part. Out of the 51 teachers who opened the test, 21 per cent were male and 79 per cent were female (see Figure 3). As mentioned, only 39 replies were included in the material and among these there were only seven from male participants. As explained in the previous section, the total number of English teachers in the county is unknown; the number of male English teachers teaching the curriculum relevant to this research is therefore also unknown. As a consequence, it is not possible to decide whether this is very few male participants or a number of male participants one should have expected. 18 per cent male participants may or may not be a representative distribution compared to the overall gender distribution among English teachers in Hordaland, and it made supporting or contradicting hypotheses on differences based on gender difficult.

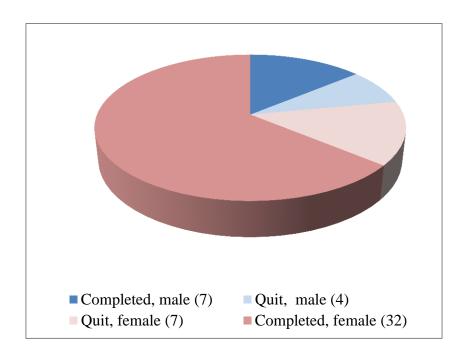


Figure 3: Gender distribution based on people accessing the survey

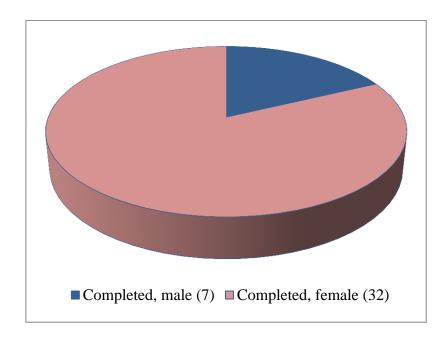


Figure 4: Gender distribution included answers

# 4.4 Questions 4 and 5

The fourth question, "For how many years have you been teaching upper secondary English classes?", was included in order to find out how much experience the participants have teaching English on the relevant level, i.e. VG1 General Studies and/or VG1/VG2 Vocational studies. The participants ranged from first year teachers to very experienced ones with up to

38 years of experience. On average they had been teaching students at this level for about ten years, and the mean number of years teaching was seven. Given the wide span of teaching experience, it will be useful to divide their teaching experience into four categories: short (three years or less), medium (four to ten years), long (eleven to twenty years) and very long (more than twenty years). The number of years a teacher had taught a particular age-group of students is an indication of how familiar the curriculum and demands will be for the teacher in question. By coarsely grouping answer to this question, it becomes easier to get an overview of how experience the participants were. The pie-chart below shows that about every fourth participant had very little experience and was therefore likely to be recently educated. A third had been teaching prior to the introduction of K06.

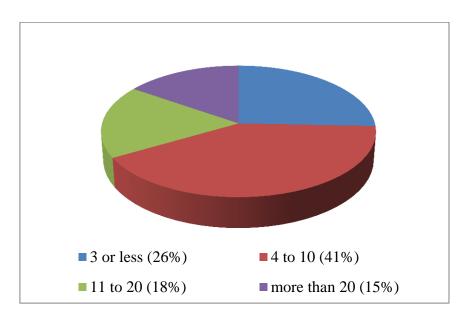


Figure 5: Years of experience teaching

The fifth question read: "What kind of classes do you teach?" The participants were to choose between: vocational studies, general studies or a combination of these. As Figure 6 below shows, a clear majority of 85 per cent of the replies, came from teachers teaching at vocational school: 67 per cent taught vocational classes and 18 per cent taught a combination of general studies and vocational classes.

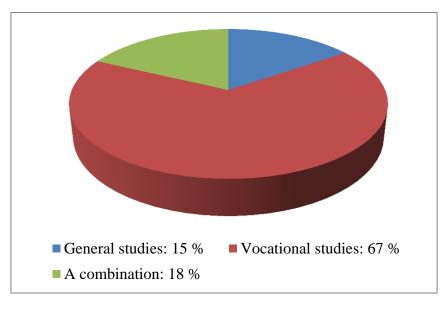


Figure 6: Type of class taught

# 4.5 Question 6

Question 6 gives the participants the first indication of what the survey is about, as they are asked to list the basic skills from K06. Here it was of primary interest, whether or not digital competence was mentioned (i.e. remembered). All the questions in the survey as well as the introductory information to the participants were written in English, and as expected and hoped for, most participants wrote their answers in English. On this particular question, however, two participants chose to answer in Norwegian. Their answers have therefore been translated into English in the list in Appendix IV (see answers marked with \*\*). A list of basic skills was asked for, and even though all the participants are English-teachers, they were not expected to remember the exact words used by the authorities. A reason for that is that many of the teachers probably had read about and mostly heard the basic skills mentioned in Norwegian. Some participants did not seem to remember what the correct English terms were and chose to make up their own terms or translate the Norwegian terms in other ways than the authorities had done such as "counting", "IT" and "computer skills". Others provided explanations like "They are both written and oral skills and cultural knowledge and grammar and digital skills". Very many participants mentioned "reading" first or second and digital competence as the last or second last skill. A great number of participants also mentioned "writing" second or first and quite a few listed "speaking" or "oral skills" among the two first. One reason for this might be that this, to some extent mirrors, the order the basic skills are listed in in official documents such as the Knowledge Promotion and the Framework for Basic Skills.

19 participants were able to produce a list similar to that used in the Framework as long as various terms were allowed liberally in order to cover the five basic skills. Few "wrong" or irrelevant answers were suggested. The answers that did not seem to refer to a basic skill were: "discuss (not sure about this though)", "cultural knowledge and grammar", "language culture and society", "understand". These phrases might be the result of an influence from types of tasks given in teaching material, like "listen and understand" and "discuss" or from headlines and competence aims in the English subject curriculum. The answer "Culture and society" could be used to illustrate this, as it is very similar to the heading of a section in the 2013 version of the subject curriculum: "Culture, society and literature". Below follows a more detailed summary of the findings among the answers provided to question 6.

**Oral skills:** Only seven participants chose to call the skill exactly that. Approximately half of the participants (22) used either "speak"," speaking", "speech", "talk", "talking" or "spoken skills". Out of these, three chose to include the phrase "express oneself" and ten chose to list "listen" or "listening" as a separate skill or, more commonly, link it to "speaking" as in "listening and speaking". In addition there was one who only mentioned "listen". This split between "listen" and "speak" might be the result of an influence from textbook and online activities labelled in as similar fashion asking student to do one or the other. Nine participants did not mention anything that might be interpreted as a reference to oral skills.

**Reading**: A clear majority, 35, mentioned "read" in one way or another with plainly "read" or "reading" as the most common choice of wording, followed by "to read" and "reading skills". One specified by using the phrase "the ability to read", while another stated that "everyone must read". The use of these two phrases could possibly be signalling a more basic level of the skill than the more general phrases used by the majority. One mentioned "written communication" which might be said to include both reading and writing. The term "written communication" may have been chosen as the same term is used as a heading of a section in the English subject curriculum. Three of the participants did not mention reading at all. All in all this makes reading the second most often remembered skill among the participants.

**Writing**: 35 participants listed one of the following: "write", "writing", "writing skills", "written skills", and "to write". The latter one might be interpreted as a skill that should be mastered fairly early on. One used the term "written communication" which might, as mentioned, be interpreted to include "reading", a skill this participant otherwise did not list. The final two used the phrase to "express oneself in writing" possibly trying to indicate that

the writing is not only a mechanical action, but rather one that should carry meaning and express ideas. In total this was the skill that most participants remembered to include as only one did not mention writing at all.

**Digital skills:** Four participants did not mention anything that might be interpreted as a reference to digital skills. Eleven participants wrote the term used by the authorities, three used the phrase "computer skills", one "ICT skills", and four used the term "digital competence". One participant opted for "digital literacy", while two only mentioned the word "digital" and another nine wrote just "computers", "ICT", "digital tools" or "IT". Three teachers referred to "the ability to use digital tools", "use ICT" and "use IT- tools". One participant explained that the students should "be able to use digital means to communicate or work" creating a rather odd distinction between working and communicating.

Three out the four participants, who did not mention digital skills, were fairly new teachers having three years of teaching experience or less. One of the hypotheses was that these teachers, being newly educated, would have been drilled in the basic skills during their teacher training and therefore would be among those who remembered to include this skill. None of the four who forgot to mention digital skills commented on the forgotten skill later on, but three of them claimed to «take the students' digital competence into consideration when planning (their) English lessons» either regularly (2) or sometimes (1). They also all offered a description or definition of the term and provided to some extent lesson plans indicating that they were after all familiar with the skill. The teachers' understanding of the term and their supplied lesson plans will be further described and discussed later in this chapter.

**Numeracy**: Ten participants did not mention anything that might refer to numeracy, five used the "correct" term (numeracy) or "numeracy skills" and "numerical competence". One teacher suggested "the ability to read and understand numbers/statistics", 15 used words like maths/mathematics/math skills/mathematical skills, four used "calculations" (one of which also used "mathematics") and one participant opted for "working with numbers". Two teachers used "arithmetic" and "basic arithmetic", while "using numbers" and simply "count" were chosen labels by the final two participants. These two last phrases might signal a more basic understanding of the term than most of the others.

Numeracy and oral skills were equally often not listed in about 23 per cent of the cases, while reading and writing were mentioned by most participants. The forth skill (digital skills) was

also remembered by most of the participants. Only four out of 39 forgot to mention this basic skill and three of these had short teaching experience (three years or less). As mentioned earlier, due to few participants and in particular male ones, there is not enough material to point to any gender based differences. Knowing that digital skills are among the basic skills to be taught is one thing, knowing what digital skills mean is something different. To reveal whether the term was understood or not, was the aim of the next question in the survey.

## 4.6 Question 7

The answers to number seven, "How do you understand the term "digital competence"?", are central to one of the research questions. 37 participants provided an answer to this and a complete list of these answers is included in appendix V. Although the participants were encouraged to provide their definitions of the term, many chose to write their answer in other forms than that of a definition. In this thesis, however, an answer to question 7 will be referred to as either an answer or a definition, irrespective of whether or not it is in the form of a definition. Some answers were very short, e.g. "To be able to use digital resources in one's process of learning English" or "It is to be able to use information technology in a critical way". Quite many answers looked like lists of what could or should be considered to part of digital competence, while others were descriptions of the phenomenon. One participant joked: "Digital" competence is the opposite of "analogue" :-) just kidding" before adding her suggested definition of the term.

### 4.6.1Digital competence in a school setting

About two thirds of the participants used phrases that linked their understanding of the term to a classroom setting referring to "students", "pupils", "teachers", "the English curriculum", "at school", "learning platform", "subject", "studies", "(language) learning", "schoolwork", "hand-ins", "tests", "process of learning English", "learning process", "education", "in a learning environment", etc.. Only a few referred to what is beyond the classroom: "sparetime", "for work", "in a learning process or for other purposes", "at school as well as at home", "in a digital world", "for daily and professional use" and "both professional and private usage". Apart from these, there were very few references to the future or the lifelong learning the authorities would like the students to be prepared for when they leave school. As will be seen in section 4.8.8, some of the lesson-plans were clearly designed to prepare the students for "life in the classroom" rather than for a future outside school. Some teachers

opted for a definition that did not refer directly to any particular setting, e.g. "To know how to use the computer as a tool, to make Powerpoint, as a notebook, and to use sources in a proper way" and "To be able to use a computer (in terms of technical knowledge of different programmes), as well as being critical of which sources to use from the internet, and how things should be published or cited".

Two definitions seem to distinguish between the students' and the teachers' digital competence:

- 1. We shall teach the students how to use a computer and different programs in their study. And of course, use the technology ourselves
- 2. I understand the term "digital competence" as how English teachers are able to integrate the use of digital information as the Internet, Wikipedia, google etc. in their English teaching.

I also understand the term as how well the students are able to use their computers to expand their English....(computer knowledge)

The first answer seems to indicate traditional teacher and student roles where the teachers are the ones in possession of the knowledge as he/she just has to use it, whereas the students are the ones to acquire new knowledge. The second answer paints a similar picture, although it points to a more distinct division: the teachers are to use "digital information" in their teaching, whereas the students are to use "their computers" in their learning. Another thing that is worth noticing in the second quote is the rather strange separation between the Internet, an online encyclopaedia (Wikipedia) and a search engine (Google). Several teachers also seem to think of hardware (computers), the Internet, and various software as separate entities as they listed them separately, e.g.

- use a computer and different programs
- use the computer and the internet as a tool
- To be able to use a computer or a tablet. To be able to use the Internet
- be able to use a computer: use Word, Excel?, learning platforms, the internet In the last definition "the internet" seems to be separated from "learning platforms" and software like Word. Although hardware and software technically *are* separate entities, they are now so integrated with one another that using a computer or a tablet (or any other digital device) in a classroom without the tool being equipped with (relevant) software and Internet access would have very few benefits. It is therefore likely that they are listed separately due to

influence from the exams where the students until spring 2016 were not allowed to use computers without Internet access and translation software on the day of the exam. The following definition seems to link the mentioned separate entities as it links using a computer with software, the Internet and "computer skills": "The ability to use computers proficiently. This includes general computer skills, and different types of software (for example Office, iFinger). It also includes the use of internet. By this I mean how to find and use information from the internet". If the earlier mentioned idea of separate entities is present in the minds of the teachers when planning lessons, this is likely to lead to lessons being planned focusing on "computer skills", the Internet and use of software separately.

### 4.6.2 Digital tools

One teacher suggested that digital competence might mean a "set of tools need to function in a digital world". Although this is a very general and vague description, it is at the same time also very open to new "tools" – whatever they might be. However, in most of the definitions the focus was clearly on the use of computers, which is not a surprise as it is mostly computers that the county has supplied teachers and students with (although some projects involving tablets have also been funded). Few modern tools were mentioned explicitly beyond "a lap top and/ or other devices", "use the smartboard", and "a computer or a tablet". None of the definitions mentioned cell phones, but among the lesson-plans to be discussed later, there was one plan where cell phones were one of the tools used. There were, however, some general expressions that were used, which might be understood to include other tools than a computer: "various technological devices", "digital resources", "digital tools", "digital device", "digital remedys", "information technology", "different gadgets surrounding us", and "spesific tools/software". One teacher defined digital competence as being able to "find their way on the Internet" without saying anything about by means of which tools.

One teacher included "recharge batteries" among examples of what digital competence might mean. This might seem like a strange, and extremely fundamental example of a digital skill. It might, however, have been an expression of something many teachers are frustrated by on a daily basis: students bringing the Macs and PCs to class, but forgetting to bring the charger. The students sometimes seem to be surprised by the fact that electricity of some sort is necessary to keep this constant flow of information (and entertainment) coming.

### 4.6.3 Programs

A few specific programs were mentioned in the definitions. Given that the participants are English teachers, the mentioning of Geogebra and Excel might seem a bit odd as these are more commonly used for other subjects like Maths and Natural Science. These programs might be familiar to the teachers if they e.g. teach multiple subjects, have worked with projects involving multiple subjects or have children of their own using these programs. The programs would then easily spring to mind for the teachers in question even though this was a survey for teachers of English.

Programs come and go and what is required of the students to know will change with time. Focusing on specific programmes might make aims "hands-on" and reachable, but there is at the same time a danger that the teachers might stagnate and not be as open as they should be to new programs and changing needs. This might pose as a threat to the development of their teaching as they might end up doing what they did last year and/or the year before and their (as well as their students') digital competence becomes outdated.

#### 4.6.4 The definitions vs the Framework

The initial plan was to compare the teachers' definitions with the one used by the Norwegian Directorate for Education and Training (2010, 2012, 2013) as well as the five categories listed in the Framework (search and process, produce, communicate, digital judgement). As the replies were more varied than expected, this turned out to be quite challenging. Some trends do, however, seem to be visible.

Search and process: One of the fields of skills in the Framework is labelled "Search and Process" and involves among other things being able to navigate digital media and resources to search for, interpret and organize information. Most of the definitions included a reference to learning how to find information on the Internet: e.g. "collecting material", "search information", "able to find information on the net", "use the internet to research a topic", "use any digital device to research any topic relevant to the English curriculum", "look up information on the net", "knowing how to search the Internet effectively for relevant information", etc.. The phrases used might be interpreted to point to various levels of difficulty: e.g. "use the internet to aquire credible information", "to research a topic", "find relevant information", "use search engines ", "to find sources on the internet" and "find and read information on the internet". The last two quotes seem to indicate a fairly basic level of competence.

**Produce:** The next field of skills in the Framework is labelled "Produce" refers to what the students should do with their tools and their findings e.g. "produce digital composite texts". Very few references were made to as what the students should do with the information they collect. The references were mainly quite vague, e.g. "write", "write a text" and "use information". The expression "texts in the widest sense" might be interpreted as a clear reference to composite texts.

Within this field of skills demands regarding the use of sources are included. On level 4 and 5 in the grid the students are required to "refer to and assess digital sources" and "master digital source referencing" (Norwegian Directorate for Education and Training, 2012, p.13). This is strongly focused on in the definitions. In all 25 teachers made references to searching the net for information and/or being critical to what one finds on the net and/or citing properly. The phrases used by the participants seem to point to different levels of difficulty when doing online research and dealing with various types of sources:

- being able to find sources online, e.g. "find sources on the internet"
- assessing sources, e.g. "search for information on the internet with a "critical eye",
   "evaluate [online sources] critically", "selecting appropriate sources from online",
   "distinguish between solid and less reliable sources of information", and "being critical of which sources to use from the internet, and"
- state sources and refer to them, e.g. "give sources", "how things should be published or cited", "proper reference to sources",

One potential reason for this strong focus on the use of sources might be the extent it has been repeatedly focused on in previous exams. (See section 2.3.5)

# 4.6.5 Creating standards

Some phrases used in the definitions seem to indicate a goal or standard for the students' digital competence. In a few definitions the students are required to master something technical such as "digital programmes" and "common browsers and programmes" as well as "use at an adequate level a PC/Mac and the relevant programs".

In other definitions there were references to ethical standards: "behave according to ethics", "behave according to net ethics", or simply "netiquette". The use of such phrases might be attempts at referring to what in the Framework is labelled *digital judgement*. Under that field of skills in the Framework demands regarding netiquette and the use of social media are

presented (Norwegian Directorate for Education and Training, 2012, p. 13). Among the participants' definitions, there were only two references to the use of social media: "Understanding digital media (internet, film, commercials, social media)" and "being able to use social media in a classroom setting, e.g. for communication, discussions etc." adding "having an awareness of how oneself interacts with various tools and its consequences". The use of the word "consequences" might be interpreted as a threat if this "awareness of how oneself interacts" is not achieved. In addition, there were some expressions referring to some quite vague standards such as "use digital remedys in a good way" and "use computer skills [...] in a useful way". These quotes might be intended as contrasts or opposites to what other participants referred to as the "entertainment purposes" and "the entertainment aspects".

One teacher stated that digital competence involved the ability to "use the Internet correctly" adding "find relevant information, give sources, etc" as an explanation of what that meant. Other teachers used phrases like "adequate level", "know enough" and "proper reference", etc. All of these phrases indicate that there is standard for what the students should know. Although it is less clear what that standard is, it is likely that students are being evaluated according to this undefined standard.

A need for the students to quote, cite and refer to sources was mentioned directly by three teachers: "give sources", "how things should be published or cited" and "to use sources in a proper way". The word "proper" points to some sort of standard. It was not said what it entailed. One participant stated that the students needed to learn how to "use sources correctly" and thereby indicating that there are "wrong" ways of doing this – i.e. that there is some sort of standard based on which the students' performances are evaluated. It is not entirely clear what is meant by "use sources": it might refer to how they are referred to, but it might just as well indicate a need for the students to be able to evaluate which parts of the collected material can be trusted or used.

# 4.7 Question 8

Question 8 asked the participants to choose one of three alternative answers to the question of whether they "take the students' digital competence into consideration when planning [their] English lessons". The answers on question 8 are summed up in the table below.

	Unanswered	No	Sometimes	Regularly
Male	0	0	6	1
Female	1	2	11	18
In total	1	2	17	19

Table 1: Considering digital competence when planning lessons

Although there are only seven male participants, it might be worth noticing that only one of them claimed to regularly take the development of the students' digital competence into consideration when planning lessons. In comparison, more than every second female participant claimed to take the development of her students' digital competence into consideration. The remaining six male participants claimed to consider it sometimes. All the male participants also remembered to include digital skills when asked to list the basic skills. Two female participants with medium and long teaching experience admitted that they did *not* take the students' digital competence into consideration while planning lessons, though one of them did remember that it was one of the basic skills listed in the K06. The other participant listed "Speak, read understand" as the basic skills. All in all a clear majority of the respondents did consider this either regularly or at least sometimes. However, it is one thing claiming to do something; it is a completely different matter actually doing it in practice. Whether the participants practise what they preach will be the focus on questions 9 and 10.

# **4.8 Questions 9 and 10**

## 4.8.1 Introduction

The answers to questions 9 and 10 are central to the survey and to this thesis as they provide insight into the second research question: what kind of digital competence is promoted in [the teachers'] teaching? Number nine read: "Please provide a rough, previously used lesson plan for a 90 minute session." The participants were encouraged to provide "enough information to make it clear what was done". The limitation of time as well as the request for enough information was only partly fulfilled. As mentioned in section 4.4, a clear majority of the participants taught either vocational classes or a combination. It would therefore have been

interesting to know what kind of class each plan was for and the teachers were encouraged to state whether this was for first or second year students, but many participants either ignored the request or forgot to state which kind of class. Question 10 asked the participants to "Please state why [he or she thought] this was a useful way to promote digital competence during English lessons". The answers to both questions will be presented and discussed in matching pairs and linked to the teacher in question's definition of digital competence where that is considered relevant. Comments made on eleven regarding answers on question 9 and 10 will also be included and discussed.

Out of the total 39 participants, five did not answer questions 9 and 10. One of these apologized that she "did not have time to complete it". As mentioned earlier, the participants did not have the opportunity to take breaks and had to complete the survey in one go in order to prevent googled answers. As expected, this also forced the participants to describe lesson-plans from memory or based on whatever notes they may have had nearby rather than copy and paste lesson-plans from their computer, the learning platform or elsewhere. This was commented on by one participant: "I don't have any lessonplans in my vicinity at the moment, so this will indeed be a rough draft".

The remaining lesson-plans, which varied greatly regarding length and level of detail, will be further discussed in this section. Quotes from the answers from the participants will be copied and pasted (as far as possible) unedited into the parts of the section where they are being discussed and the full answers to questions 6-11 are included in appendix IX. The plans will be presented in groups according to a broad categorisation, which has been based on what the students were asked to do and/or the tools used. Although some of the plans could fit in several categories, they have been placed in just one and mainly discussed there.

In section 4.8.2 a collection of plans where mixed material is used will be discussed, followed by plans training the students in basic digital competence in 4.8.3. The largest group of plans will be presented in section 4.8.4, which presents plans asking the students to make a presentation of some sort. Section 4.8.5 includes a plan where the students are asked to use "New tools". Plans asking the students to write a text (i.e. other than a manuscript for a presentation) will be discussed in section 4.8.6, and in 4.8.7 plans focusing on the use of sources will be presented. Section 4.8.8 is labelled "practising for life in the classroom" where learning to use software and/or platforms was focused on. In section 4.8.9 an attempt at combining art and background information into a composite text is discussed. The final

section, 4.8.10, deals with what was not commented on by the participants. Each plan will be linked to a participant/teacher by means of numbers and these numbers will correspond to those used appendix IX where there is a complete set of answers to questions 6-11.

#### 4.8.2 Mixed material

In this section lesson-plans that are very general and vague will be presented as well as those describing a mix of various online and offline activities. Teacher 1 provided a very vague plan, which does not seem to be a plan for one particular double lesson, but rather a summary of activities the teacher thinks are relevant when promoting digital competence. She has defined digital competence as teaching "students how to use a computer and different programs in their study". Her list of activities involves using a computer and different software, but the lack of detail and description of steps made makes it more or less impossible to discuss this further with reference to what sort of digital skills that might have been promoted. It is for instance very difficult to understand what is meant by "spoken task" or "doing tasks". This lesson-plan will therefore not be commented on beyond the programs and platforms that are mentioned (see section 4.8.8 and appendix VII).

Another vague response came from teacher 2 who chose to comment on question 10 while leaving number 9 unanswered. She claimed to "normally use [the] computer in every class" before presenting what seems to be a list of various activities combining digital competence and English curricular aims. On number 11 she comments on this adding that "The training of digital compentence is not done sperately but integrated in the work we do on the subjects".

Her answer can be interpreted as a list of various activities that she has used in her classes in general and over time rather than during a specific double lesson. Among the topics that she refers to, is "current affairs". The use of online sources to work on current affairs will be commented on later when discussing a different lesson-plan dealing with the same topic. The BBC and CNN sites will be commented on when discussing the platforms, software and sites named by the participants in section 4.8.8 (see also appendix VII).

Teacher 3 had medium teaching experience and claimed to "always try to integrate the basic skills in [her] English teaching" listing "written and oral skills and cultural knowledge and grammar and digital skills" as the basic skills. (Cultural knowledge and grammar are, as discussed in sections 4.5 and 4.6, *not* included in the basic skills). She stated that she understood the term digital competence as "how English teachers are able to integrate the use of digital information as the Internet, Wikipedia, google etc. in their English teaching" and

also "as how well the students are able to use their computers to expand their English...(computer knowledge)". It is not clear what she means when she distinguishes between "the Internet, Wikipedia and google" or what she means by the term "digital information". As mentioned in section 4.7, she might be making a distinction between a teacher's digital competence and that of a student. She labelled her lesson-plan "Text understanding", and the plan seems to include the use of various online and offline sources and tools as it involved: reading aloud in class, answering "questions and grammar on itsl", and watching something online. It is not entirely clear whether this is the general layout of (most of) her lessons as she does not state which text(s), questions or grammar (tasks) were worked on. At the end she says "we might use" indicating that there may have been other ways of ending the lesson(s). It is not stated where the text is to be found either, making it impossible to know whether any digital tools were involved when reading. If the text was read on screen, tools might have been used to help the students increase their understanding of the content as well as getting assistance with pronunciation and decoding, e.g. if some of the students have reading difficulties. The reading aloud part of the plan seems to be very traditional: one student reads while the rest (passively) listen followed by an attempt at making them talk about the text (i.e. she states that she tries "to ask the students about the text"). Seemingly, the students are asked to first answer questions about the text orally before doing the same in writing. She says her plan is a good way to promote the students' digital competence "Because the studens use digital information and their digital skills during the English lesson....(also we listen to the text after reading!)". It is not clear where the listening part fits in or the purpose of it as they all already had listened to one or more students reading the text in question aloud. The use of "we" here might mean that they all listened to the text together in class or alternatively individually on their computers. There is not enough information to find out who added "questions on itsl", what these questions were about and what function they served. She adds that by letting her students work on tasks on itslearning she is able to "see" what the students have and have not done. This is not only an advantage for the teacher, but can also be a helpful tool for students to keep track of what they have done and what they need to do. Keeping track of progression might help motivate the students to make an (extra) effort. She does however not comment on whether she makes use of this function<sup>10</sup> on itslearning.

. .

<sup>&</sup>lt;sup>10</sup> Giving the students a proper overview on itslearning of what work has been done and what is up next, requires certain alternatives to be selected by the teacher.

While the previous plan was fairly vague regarding topic, the plan provided by teacher 4 is fairly concrete: building vocational vocabulary for future hairdressers. Teacher 4 is an experienced teacher who focused on the technical use of tools in her definition of digital competence: "be able to use a computer: use Word, Excel?, learning platforms, the internet". Her plan was to do "tools task" on NDLA, use Quizlet to practise hairdressing terminology, practise vocabulary to describe different hairstyles in pairs using a website, before writing a hand-in on two current hairstyles inspired by a given website. Even though it is not stated how the first two activities were executed, it is fair to assume that the tasks involved individual work online, interactive drills on vocational vocabulary and that the exercises were most likely accessed by clicking on links provided by the teacher. The third activity encouraged collaboration when naming and describing hairstyles. On the last task it was not said whether this was done individually or in pairs. If the latter was the case, software facilitating collaborative writing might have been in use, e.g. Google docs, though she states that what was handed in was written in Word.

For work on vocabulary and current trends within the relevant trade, teacher 4 did not use a ready-made textbook, but rather various online material, i.e. NDLA tasks, Quizlet task (possibly made by her or a colleague) and a not specified website she chose for her students. The challenge of providing enough and relevant material for vocational classes within their study program and/or future job has been solved in different ways by textbook publishers. Some have chosen to print a textbook for the general part of the curriculum while supplying additional vocational material online (with or without requiring additional fees for access) e.g. the Tracks series from CappelenDamm. Others have chosen to print one book or publish one SMARTbook for each study program, e.g. one for building and construction, another for art and design, etc. (SKILLS-series from Gyldendal is an example of this). These usually have some general chapters that all versions have in common and some chapters focusing on vocational vocabulary and content. On question 10 this teacher commented on the challenge of finding enough, good vocational material: "The textbook we use does not have this type of material for hairdressers and will of course never be able to provide up to date information on topics like fashion." She also commented that "In addition, handing in texts on it's learning is much more practical in every way." Unfortunately, she did not specify any further what she found to be "more practical".

Teacher 5 is a teacher with medium experience. He limited his interpretation of digital competence to the learning process as he defined it as "To be able to use digital resources in

one's process of learning English". His suggested lesson-plan focused on "news" and the "gun issue" in the US and the students were to switch between digital and non-digital sources and tools. First, he asked his students to "scan digital newspapers for relevant news items and summarize to each other". The findings were then commented on and discussed in class, before the students "read an introduction in their reader (Tracks 2013) and worked online with various tasks". The first task involved listening online to a dialogue and was worked on individually. The teacher considers an individual (online) listening task to be a benefit as it "enables the pupils to work in their own pace". The students were to "listen to a dialogue between two individuals discussing the gun question and its pros and cons", afterwards they were to prove "how well they had understood the dialogue" by answering tasks, which are likely to have been online and interactive. Finally, the students returned to their textbooks to read a text called "Black and White". He claimed his plan was a good way to promote digital competence as the students "get to navigate digital newspapers written in good English (e.g. www.bbc.co.uk) and will also be made aware of various critical aspects (quite often the pupils will wonder at the difference in coverage a given news item receives in English and Norwegian media)".

As mentioned, this teacher considers digital tools as helpful when adapting to the students' individual needs. On question 11 he elaborated further on this by stating that "Digital tools are helpful for optimizing teaching and creating varied circumstances in which pupils may learn English best". When students work online with authentic and (probably) up-to-date sources, i.e. online newspapers, dealing with the issue in question, the students might have to be able to find, interpret, navigate, and evaluate these sources as well as present findings. Though www.bbc.co.uk is here mentioned as an example of such a source, it is not entirely clear whether the teacher pre-selects all the newspapers or the students themselves have to decide which sources to choose in order to read "good English". The latter will demand more of the students, although it is worth noticing that the BBC website is likely to be quite challenging for the students to get an overview over and to find what they need would require advanced searching skills.

Teacher 6 provided a plan for working on Northern Ireland. It was designed by a teacher with short experience who defined digital competence as "Being able to use the computer and the internet as a tool, both in school and in their sparetime". Her suggested lesson-plan included activities that might be considered to be quite traditional (i.e. read a text, take notes and find answers to the questions). The lesson was also mainly teacher controlled: she had selected the

text in the reader as well as two sources on the web (Tracks and BBC) and selected the questions to be answered. Both the Tracks site (which seems to be one particular text) and the BBC were probably linked to directly and therefore easy for the students to find. The BBC website, which was also mentioned in two other plans, is a very large collection of material. This was something the teacher was aware of and chose on purpose to *not* guide her students beyond linking to the front page in order to encourage them to practise their searching and sorting skills. As the site was prechosen by the teacher, the students were not encouraged to evaluate the reliability of their findings the way googling freely would require them to do. The teacher still thought this was a good way to promote digital competence because "We cant give the students information of what to do and what not to do, they have to experience it themselves. Explore various sites, find information, aso." Her lesson-plan let them do just that, though in an environment which she had chosen and preapproved herself.

# 4.8.3 Basic digital competence

Basic digital competence as used in this section is *not* to be confused with the term basic skill as used in the English curriculum Framework for Basic Skills. Here basic digital competence is meant to indicate a basic, or very low, level of difficulty when it comes to using digital tools. In this section, two lesson-plans are to be presented. They were both quite traditional in the sense that the tasks the students were given were fairly similar to tasks which have been in common use prior to the K06 and could therefore more or less have been carried out without the use of a computer or Internet access. They were strongly teacher-governed and required the students to have only very basic digital competence. It might be worth noticing that both plans were provided by teachers with (very) short teaching experience. The first plan, provided by teacher 7, involved writing a job application and a CV. First the students were to "use TracksPRO (digital software solution additional to the regular textbook) to learn the structure of an application letter and a CV", before writing the application and CV in Word and presumably handing it in on itslearning.

Teacher 7 claimed to sometimes consider her students' digital competence when planning her lessons and defined digital competence as "Skills regarding which sources are reliabld when writing, "netiquette", cooperation over the Internet, the use of spesific tools/software". The lesson-plan she provided only promotes the very last part of what her definition covers as this is strongly teacher governed and could also easily be carried out without any digital tools at all: a description of and/or example of the layout of a CV and an application could just as well

have been included in the paper copy of the book or on a (paper) handout. The hand in, the CV and the application, could also have been written on paper. Though uploading a file to itslearning as well as setting up a formal letter and a CV in Word requires *some* knowledge of the platform and the relevant software, this should be considered basic knowledge for a student in his/her eleventh or twelfth year of school. Finding the relevant material on the TracksPro website does also require a certain level of digital competence if the students are to find the material on their own. This is mainly due to the website's poor layout, confusing structure, as well as lack of opportunity for the teacher to link directly to the desired material. On question 10 teacher 7 doubts her own choices (and possibly her own digital competence), as she states that "I am not too familiar with using digital tools myself, so I'm not sure if this will help enhancing digital competence in English".

The second plan in this category was provided by teacher 8 who was not present in the classroom when the plan was carried out. In her definition of digital competence she focused on what is needed in class: "know enough to use the computers to search information, write texts, make presentations, deliver schoolwork". Her plan involved "Analyzing short stories". The students were to choose one out of three short stories, which "were presentend on the class page on it's learning". "On the same page they could also find examles of how to analyze a short story (in Norwegian and English)". They were then to write their analyses in Word and deliver them its learning. It is not entirely clear whether the students were left completely without a teacher when working on this task as she states that when she "came back", she "could explain more exactly and give them advice about this kind of exercises".

In order to carry out this plan, the students had to find and read the files she uploaded on the itslearning page for their English classes, given that that is what is meant by "presentend on the class page on it's learning". Then the students had to be able to write a text in Word and hand it in on itslearning. On question 10 teacher 8 claimed to take advantage of the messaging system when she is not present in class herself. This requires the students to be able to find, open and read a message and, if necessary, write and send a reply. Though the plan promotes some types of digital competence, neither of these work operations requires more than what today must be considered very basic digital competence for a student in upper secondary school if compared to the grid outlining progression (Norwegian Directorate for Education and Training, 2012, p. 13). In addition, most of the activities could quite easily have been carried out without computers and Internet access, though it would probably require a substitute teacher to be present in the classroom to hand out and take in papers: the short

stories and the examples of analysis could just as easily have been printed in the textbook or on a paper handout and the students could have written their texts with a pen on paper and handed this in.

Her full answer on question 10 read: "You can get in contact with the students from any distance. If they have cuestion when I am absent, we can reach each other. In class they can easily write texts in Word, and as we are working a lot with projects, they need to search information on the web". However, her current lesson-plan does not seem to require the students to do any searches on their own. She also points out that it is important to "shut down the computer when it is not needed". This might indicate that she has slightly misread the question and rather argues why and when it is a good idea to use computers in general.

# 4.8.4 Making a presentation

Asking the students to collect information on a certain topic and present it to their peers and/or their teacher seems to be common activity in the county's English classrooms as more than half the lesson-plans involve this kind of activity. The following section will focus on these.

One such plan was for VG1 vocational studies and was provided by teacher 9 who defined digital competence as: "Ability to use a computer at school for collecting material, write, make presentations. Organize notes on a PC, [...], learning platforms, etc". Her plan was in accordance with her definition. The focus is on a particular English-speaking country, the US, and it imitates a "real life" situation the students might be faced with: planning a trip on a budget. In such a setting, going online seems like a natural choice. The task involves searching for as well as selecting and collecting reliable and updated information and presenting it orally using PowerPoint as a tool for both organising and communicating the findings. The end product may include an edited combination of text, pictures and other illustrations, tables and/or statistics which the students are to present and which will (hopefully) provide their fellow students with knowledge and understanding. The use of the pronoun "you" does not reveal whether this task was completed individually or in groups. To explain why this was a good way to promote digital competence the teacher listed the following reasons: "1) Real life situation. 2) Motivation. Everyone likes to travel, and PC is often used in real life to look for attractions and tickets. 3) Making a powerpoint presentation is an important skill today, later in life they will find it handy to have the experience, 4) English texts and language is used on the Net everywhere".

Teacher 10 provided a very similar plan, though this time the work was to be carried out in groups. The teacher had defined digital competence as follows: "it means that one can use computer and internet for both professional and private usage. It can mean that people are able to find information on the net, use computer programmes for work and private/entertainment purposes..." As stated, her supplied lesson-plan resembles the one above as this also involved finding information online in order to plan a trip to an English-speaking country, the UK, and then presenting the plans and the budget. This was therefore also a school task imitating a situation the students might be faced with in their private lives.

Teacher 10 provided a more detailed plan than teacher 9 as she included information about the how the group work was organised, details on what should be included in the presentations and requirements regarding the budget. She also provided information on how the students built background knowledge about the area in question (London) by reading texts about "the UK and London" and talking about it.

Depending to some extent on how many texts they read and talked about, both reading and speaking about "texts" as well as collecting, sorting, selecting and preparing to present information on the given topic, must have been quite challenging to get through within 90 minutes even though the presentation was to be "short". It is therefore likely that this plan was for a somewhat longer session than a double lesson or that the reference to an "overall topic" means that the "texts about the UK and London" had been read and spoken about beforehand. The task is, as mentioned, very similar to the plan provided by teacher 9 and therefore more or less involves the same activities, though in this case, it is not said in exactly what form the students should present their plans.

On question 10, the teacher must have slightly misread the question as she commented on why teaching digital competence, rather than on her digital choices in her lesson-plan: "I cannot imagine future life without digital means of any kind so they must learn to use it, not only to play games. I hope using internet and laptops also help them to be more motivated to learn English".

Another plan requiring the students to research a topic and present the findings to the class was provided by teacher 11, who has long teaching experience. She stated that digital competence involved that "The students should be able to find and use information from the internet. Know how to use the computer in different ways, and be able to use the right sources etc." Her suggested lesson-plan was in accordance with her definition of the term and read as follows: "Vg2 The state of the World: Find information about a voulntary

organization: Where, how, when they work, how many people are members etc. Make a presentation and present in class." She claimed that this was a good way to promote digital competence because "The students learn how to find reliable sources and search for specific information." Apart from the required budget-considerations in the previous plans, this plan basically requires the students to do the exact same things.

The next plan is quite similar to the one above, though it has been described in more detail. Teacher 12 is an experienced teacher of vocational classes. She defined digital competence as "Being able to use computer software (e.g. word processing and have a system for storing), the Internet, presentation tools (both software and technical equipment such as projectors etc.)". Her suggested lesson-plan was for students at second year health and social studies who had recently had their work placement weeks. According to her plan, the students were to make a "Presentation of work placement in a nursery school or SFO". Her plan seems to cover all that she mentioned in her definition. In order to provide them with relevant vocabulary the students had done "preliminary work" by "reading texts about working with children, children at play, being a role model etc." The 5 minute presentation was to include:

- the institution and unit where they work
- the routines of a normal day/week
- the work they do
- what learning target they have chosen and how they work with it in practise
- evaluation of work place and their own work

During the double lesson at school, the students had "to find information about and pictures from the institution on the Internet" and "search the Internet to find pictures that can illustrate the rest of the presentation". The students could freely choose among various presentation tools such as Power Point, Moviemaker, iMovie, Photostory and Prezi, but were encouraged to try something that was new to them. The presentations were held the next lesson and the teacher states that "the use of ICT [was] one of the criteria for evaluation". She thought this was a good way to promote digital competence in English because:

The students have a twofold task in finding something they need on the Internet. First, a very specific task that requires them to go to a specific website. Not difficult, but in addition they have to translate the information into English. Then most students will use online translation tools and they will find that it takes more brainwork to translate the words and phrases than hitting the right key. Second, there is a fairly specific task in finding illustrating pictures. This may take them to all sorts of

websites. Then they have to practise finding the most useful search words in English, a skill that will always be useful.

Which "specific website" she uses as a starting point for her students' research is not clear, beyond that it seems to be a site chosen by the teacher where the students read a text and that the content of this text needed to be translated into English to be used in the presentation. The text might be e.g. on NDLA, in a digital textbook or simply the homepages of the institutions where the students had their work placements. Though she initially claims that "Most students are familiar with Power Point and Moviemaker", she later on explains that there are still some who are not and that they are "guided and helped". It is not clear whether this guiding and helping is done by the teacher alone (she has a short session on the programs "unless [the students] protest too much") or in combination with that of fellow students. This might hint at previous, challenging situations if a few students are not familiar with the tools while the majority claim to know it already. She also clearly points out that she encourages her students to develop their digital repertoire by trying out new alternatives rather than just using the software they are familiar with. On question 11 she added that she "forgot to say that evaluating digital sources is an important part of digital competence. Students are therefore asked to state their sources and, in presentations, to comment on them."

The plan provided by teacher 13 requires the students to do fairly the same as the four aforementioned plans, though it does not limit the students' choice of topic. It might therefore be questioned to what extent the resulting presentations were relevant regarding the aims in the English curriculum beyond presenting a topic *in* English possibly based on information from online sources written in English. Though PowerPoint is not specifically mentioned, the reference to "the visual part of your presentation" may include the use of this tool or a similar one. On number ten she stated that she thought her lesson-plan would help her students practice finding and selecting information as well as "preparing a visual part".

Teacher 14, who has short experience, provided a brief plan, quite similar to the one above. She suggested that digital competence among other things involved "how to use the internet to research a topic or how to use a computer to write a paper". This was covered in her plan which required th students to make an oral presentation on a "given a topic that they had to research. The topics were current events so it was natural to use the internet for research". She encouraged her students "to use power point or similar" tools when presenting.

There are, however, two differences between this and the previous plan: firstly, the plan made by teacher 14 does not state whether the students were to write a script or "just" use a

PowerPoint or similar when presenting. In addition, in the previous plan the students were free to choose any topic, while in this plan the teacher chose the topic (current affairs) and presumably the students were given individual assignments within that topic as the plural forms "topics" and "events" are used. The plan was to be for a 90 minute session and by deciding who were to research what, the teacher probably saved a lot of time. It is however likely that this plan, if holding the presentations were included too, took more than 90 minutes to get through, though no clues were included as to how long each presentation was. None of the plans included any requirements regarding which sources the students could use and neither checking the reliability of these sources nor ways of using citation and stating sources were mentioned.

The theme, current events, would make it more or less impractical and unnatural to use other sources than up-to-date online ones. Teacher 14 argued that her plan would promote the students' digital competence as it "covered both the practise of using digital tools for research, and how to use it for communication. Both are highly relevant in work situations and for further studies". Her plan was in line with most of what she thought the term digital competence included: "Kowledge in how to use digital tools to enhance learning, for example how to use the internet to research a topic or how to use a computer to write a paper".

Teacher 15, who has very long experience teaching, supplied a plan where her students were to do various tasks in order to gain insight into a topic they were to have a presentation on, namely "Global English (history)". She had defined digital competence as to "be able to write and upload a document, find and read information on the internet, make folders, be able to use the mail and message devices, make presentations with links and pictures, take prints, download and save programmes". Her plan may be interpreted to partly cover her definition:

- 1. Vocabulary task (central words they have to learn): use of online dictionary
- 2. Find and study a map (given link) on the topic
- 3. Read a couple of factual texts on it's learning and on NDLA
- 4. Take a quiz (from the factual texts)
- 5. Make a presentation based on information gained (pictures, links, sources)

She claimed that her suggested lesson-plan gave "the students the opportunity to practise several aspects of their digital competence". Presumably, the tasks were all accompanied with links to specific sites chosen by the teacher. Activities 1-4 were therefore strongly teacher-controlled which means they required very basic digital competence from the students. On activity 5 the students were asked to make a presentation, seemingly based on the material

provided by the teacher. The students were therefore most likely not required to search for and evaluate information on their own in order to create their presentations. Her mentioning of "find and read information" in her definition of the digital competence would in her lesson-plan only mean information provided online by the teacher. Depending to some extent how long the "couple of factual texts" were, it is likely there were little time or room for the students to do other searches during class if they were to finish in time. On question 11 she added that the students were required to make a PowerPoint which was to be handed in prior to their presentation. It is neither stated how long the PowerPoint or the presentation should be nor whether the students should work individually, in pairs or in groups.

Teacher 16 had also asked her students to "Create a digital presentation" on a given topic, namely "British history/culture/politics". The plan was part of a two week project where the students worked at school for 90 minutes, before finishing their preparations at home and having presentations the following week. The teacher behind the plan, defined digital competence as the "Ability to use digital tools in the language learning, searching for information, using digital dictionaries, taking advantage of opportunities given by working with text on pc, making digital presentations, selecting appropriate sources from online, etc." Quite many of the activities that she mentions in her definition were also included in her lesson-plan. The presentations were to last 3-5 minutes and the students were "allowed to use power point, prezi or suggest others, but all students used power point because they are familiar with it". The students should also "Comment on the sources used"...

On question 10 teacher 16 stated that this was a good way to promote the students' digital competence "Because the digital competence aim becomes quite clear, they get a chance to practice finding and reading different sources and have to be selective due to the short time span and they get to practice making a presentation which they are likely to need to be able to do in further studies/work and on an oral exam".

Not all participants seemed to be entirely convinced that making a presentation based on information found online is a beneficial way to work. An example thereof might be the contribution from teacher 17. She has long teaching experience and defined digital competence as to "Be able to look up information on the net, use the smartboard to watch a film or give info. to produce power point, text, tasks etc on your computer". This was her suggested plan:

Australia: Read a novel in their book, find information about Australia on the net. Make a power point presentation to perform in class. Hopefully they will learn more about Australia, which is part of the curriculum, by actively finding info by themselves.

Given that this was a plan for a 90 minute lesson as well as her reference to "in their book", it is likely that the word "novel" was supposed to be "short story". She did not state what the presentation was to be about beyond "about Australia" which she claimed "is part of the curriculum". This is only partly true as Australia is not specifically mentioned in the curriculum. It is however, one of many "English-speaking countries", which is what should be covered. As she was only asked to provide a rough lesson-plan, it is likely that her students were given a clearer instruction on what to collect, select, organise and present. The use of the word "hopefully" when outlining her plan might indicate that she is doubtful about the benefits of working on a computer. In addition, she initially admitted that she did not take the development of her students' digital competence into consideration when planning her lessons. However, she later claimed that her suggested plan was a good way to promote digital competence as "It is a good alternative to their English book" and that her students are then "learning by doing".

Though the asked for lesson-plans were to be for 90 minute sessions, not all were. As already commented on, some must have taken longer than 90 minutes to complete, though the teachers providing them did not say it. In two plans, it was, however, very clearly stated that they were for multiple sessions. The first one is a lesson-plan for 4 sessions of 90 minutes provided by teacher 18 who had long teaching experience. She claimed that the plan let her "students learn and practise many aspects of "digital competence" at once" including searching, stating and evaluating sources. The students were to work in pairs to prepare to present without a manuscript 8 minute lectures on African American history and "current states of affairs for that group". First they needed to get "a narrow topic and approach to the topic approved by the teacher" before searching "for good sources of information, [collecting] information/graphs/images etc. and links for the sources".

She defined digital competence as "To be able to use at an adequate level a PC/Mac and the relevant programs on it for learning purposes, communication and for hand-ins and tests, as well as to be able to distinguish between solid and less reliable sources of information". Her lesson plan was in accordance with her suggested definition of digital competence. As the

students were to comment on "current states of affairs", using up-to-date online sources became the natural choice. According to teacher 18, the only other sources available to her students would be "a 7 year old textbook [...] and the knowledge [she was] able to give them". To "avoid the pitfall of creating a purely reproductive lecture" the students had to get their topic and approach approved by the teacher. The aim was to get them to discuss, evaluate and reflect upon what they found and present this using only a "visual presentation" and no script. The software for making the presentation was not specified and was possibly left to the students to choose for themselves. She also added that "They must speak English while they work". It is not clear whether she by using the terms "speak" and "work" means to vocally speak to each other while in the classroom or whether this refers to the use of e.g. co-writing tools such as Google docs and/or co-operation via e.g. chats on social media.

The next plan was also for a project on English as a global language and spanned over seven or more lessons. Teacher 19, with medium teaching experience, had provided the following, comprehensive list as a definition of digital competence:

To be able to use digital tools, i.e. hardware and software, in a learning environment. This entails skills like:

- knowing how to use Word, Powerpoint and a variety of other software in an effective way to produce various work
- knowing the computer (what buttons to click and whatnot) and how to use it for presentations, making audio and video files
- knowing how to search the Internet effectively for relevant information
- having an awareness of the quality of information on the Internet
- being able to use social media in a classroom setting, e.g. for communication, discussions etc.
- having an awareness of how oneself interacts with various digital tools and its consequences

According to this lesson-plan, the students were to work individually on identical questions and the end product was to be (individual) presentations to the class followed by feedback from peers, self-assessment and finally the teacher's evaluation. In addition to the students learning about "English as a global language", they should also "become familiar with it's learning and Powerpint or Prezi", "learn how to cite sources", "use digitial and non-digital sources to answer the questions". Teacher 19 also adds that "This project did not emphasize critical awareness as such, although individual students were given advice when difficulties and problems arose".

He thought this was a good way to promote digital competence "Because the students had to use it's learning and the digital sources provided there in order to learn about English as a global language. Furthermore, they had to use digital tools on order to show their competence and for self-assessment". In this project texts pre-selected by the teacher were to be used and combined with "other sources from the Internet". The students were to "use it's learning as a starting point". There they found folders with "a variety of digital and non-digital sources" sorted by question to be worked on. One of these questions was concerned with "the current status", which meant that the students most likely either were given links to or would have to search on their own for information that was more up-to-date than one normally can expect to find in a textbook (at least a printed one). At the start of the project, the students were lectured in class on how to cite sources, while the students were (only) shown "upon request, how to make a presentation using Powerpoint of Prezi". This indicates that he expected most of his students to already be familiar with at least one presentation tool, but not with how to cite sources correctly. He does, however, later on state that one of the aims for the lesson(s) was that his students "should become familiar with it's learning and Powerpint or Prezi". This makes the picture a little less clear.

The next five plans also involve gathering material and presenting it, but these five were unique in four respects. The first two are special in the sense that the presentations, though oral, are not to be presented live but recorded. The third plan is the only presentation where the students are clearly encouraged to include soundtracks which they had to search for and select themselves. In the fourth plan the students were asked to make and record themselves acting out a dialogue, and in the fifth plan it was not the students who made the presentation, but the teacher.

The first "special" plan was provided by teacher 20, who had short experience teaching. She suggested the following list as a definition of digital competence:

Be able to use digital remedys in a good way.

Be able to be critical to information you find.

Be able to be critical to where you find information.

Be able to save and use information you find or things you have made.

Her lesson-plan was for a second year vocational class and was to result in a Screencast-O-Matic recording of a presentation, or "a digital story", including "pictures/movies" as well as the students'voice. The topic for the presentation was to be indigious peoples of English

speaking countries, which the class had been working on for a not specified period of time. The students were to include information on where the chosen indigenous people "live/lived, how they lived, how the state have treated them, how they are treated by ste state, and live, today". The goal was for the students to "to find and use information, get knowledge about one (or more) indigious peoples, use a digital remedy to make a story".

According to the teacher, this was a good way to promote digital competence because "It is a way to make them use a digital remedy the probably woud not have known about if I had not shown them" thereby (seemingly) claiming to help build some of her students' digital repertoire. When defining digital competence, she focused on being critical to "information" as well as "to where you find" it, and on number ten she adds that her plan "is a way of making them awer of the responsibility of being critical of the information they find". However, in her actual lesson-plan she only requires her students to "find and use information".

On question 10 she also points out that handing in a recorded presentation "is also a way for them to present, not for the class, but for [her] alone (without it taking several lessons where the other pupils think of it as a "lesson off")." Here she refers to a common situation which is quite challenging: the teacher has a limited number of lessons to work on the (many) aims in the curriculum and is within the same timeframe required find time to evaluate all her students. Evaluating students' oral skills is difficult to do without the rest of the students fending for themselves for one or several lessons, which means that the majority of the students normally will not get much work done as they think of it as time "off".

In the next plan the students were also asked to make a presentation and record it. This time they could choose between using Photostory or iMovie and were to "be creative in choice of pictures". Similar to various previously presented plans, the students seemed to have an unlimited choice of topics. The plan was made by teacher 21 who had short experience teaching. He defined digital competence as a "set of tools need to function in a digital world" and asked his students to "find a subject of preference" and "make a photostory/imovie presentation". The students were to "find information in differenct sites at internet" and "be creative in choice of pictures". They were also to "include list of sources".

Only vague references to aims in the English curriculum are made. Examples of this are search for information and stating sources. These sources are possibly written or spoken English, e.g. TEDtalks and YouTube videos. His plan could, however, seemingly have been

carried out within many different subjects, e.g. natural science or social studies. He seems to expect that his students are familiar with Photostory and/or iMovie as he simply "asked" them to make a presentation. On question 10 he states that this was a good way to promote their digital competence "because they need to be creative and critical about the sources they find appropriate. Find new info. This is a way to use DC in schoolwork" adding on numbereleventhat "In general, the C pupils have is very narrow". (Here D is understood to mean "digital" and C to mean "competence").

The next lesson-plan is uncommon as teacher 22 clearly encourages her students to "try to find" and include a soundtrack in a "short oral presentation about the English language in a given country". The topic was "Varieties of English".

Write down your sources, comment on credibility, use a power point when presenting. Why: Be able to recongnize varieties of English, understand how English spread and became a global language, practice searcing on the web, and learn to question your sources. Practice making a well structured and informative ppt. Practice your presentation skills and oral English.

It is not clear what is meant by "short" presentation here, as the students were to work and present in groups of three and answer quite many questions: why English an official language in the country and what characterizes the English used there as well as what the attitude towards the English language in the country. The students were also to find out whether there are other official languages in the assigned country. She argued that her plan was a good way to promote the students' digital competence because "the students get to practice how they can use the Internet to help them find information, to be critical of what they find and reflect on their use of sources". She defined digital competence as "to be able to use different programs to help you in your studies (all the basic office-program) and to use Internet correctly (find relevant information, give sources, etc.)". The suggested lesson-plan requires her students to do both, although what she means by using the Internet "correctly" is not entirely clear (as discussed on section 4.6). What was not said in this lesson-plan was how the students working in trios cooperated to produce *one* PowerPoint: did they just sit physically near each other at school (or elsewhere) or did they work together online using tools such as Facebook to exchange ideas and information or Google docs to co-write?

The fourth plan was provided by teacher 23, who has short teaching experience. She described a plan where the presentations were to be recorded, pretend job interviews. Teacher 23 had defined digital competence as "To be able to use a computer or a tablet. To be able to use the internet to do research and to use software installed on the computer". Her plan starts

with a class discussion on how one would "go about finding a job" and what one should and should not do. Based on information from the discussion as well as from reading job adverts in their readers and on a website, they were to write a script for a job interview, act it out and record it. The plan therefore includes a mix of material and methods: classroom discussion, reading in a textbook and online, writing a script, finding and downloading recording software, acting out the interview while recording it and handing the finished product in. This means that the plan also could have been presented in the section dealing with mixed material. Instead it has been included among the (unique) presentations as it is the only plan involving students co-operating to record a "play" imitating a real life situation: a job interview. This requires the students to be creative. Two previously discussed plans also asked the students to "handle" a real life situation when they were required to plan a journey. However, planning a journey required less creativity than the current plan as the students were mainly asked to collect, sort and present facts. Teacher 23 thought her plan was a good way to promote digital competence because the "Students need to use their computers daily in order to find information and communicate with others. Finding job adverts online is also something they might need to do later in life". It would, however, have been interesting to know whether software for collaborative writing was used when writing the script something which would promote their digital competence further.

At the centre of the last "special" plans is a PowerPoint presentation held by the teacher instead of as in the other cases; by one or more students. The plan was provided by teacher 24, who has medium teaching experience. She chose to use the survey as an opportunity to promote putting the computers away more: "Learning when NOT to use your own computer, put a limit to its use is also an important skill." This might possibly be seen as an attempt at extending the concept of digital competence. She suggested a plan the teacher hands out "20 questions on a sheet of paper to each student". The students are then asked to "put away computers and use a pen to make notes/find answers to the questions while listening to a powepoint presentation by teacher". The presentation is a "comparison between Canada and the USA" and lasts for 45 minutes. During the presentation, the students find the answers to the questions, and then they have to "read one of the questions and provide answers, in class, one by one". Teacher 24 claims that "Listening to a powerpoint presentation without being distracted by your own computer is also a didital skill".

She had previously stated that she regularly took the students' digital competence into consideration when planning her lessons and that digital competence involves:

"ability to use Internet sources/paraphrasing search engines powerpoints/photostory/word/excel How to systematize documents Clouds"

Though, as the provided lesson-plan promotes neither of the above beyond presenting an example of a PowerPoint, her lesson-plan might have been intended as an ironic comment on the extensive focus on digital competence or possibly as an attempt at making fun of the survey itself.

#### 4.8.5 New tools

In this section a plan involving the students using other digital tools than computers will be presented. Teacher 25, who had medium teaching experience, presented this plan. She instructed her students to with the help of their cell phones create their own material to some extent rather than the more common option of research, select, organise and present.

The material the students were to collect was pictures which were to be used to illustrate vocational vocabulary or "tools in the workshop". This is the only plan which suggests that the students should use other "gadgets" than or in addition to their computers in their learning activities. (Although there is also one plan which involves the use of the SMARTboard, it was to be used by the teacher and not by the students). The suggested lesson-plan was in accordance with her definition of digital competence as she focuses on "The ability to make use of the different gadgets surrounding us. To master common browsers and programs". After taking pictures of "different equipment in their workshop", the students returned to their ordinary classroom and upload the pictures "into their computers and to PowerPoint, put the correct names on the tools in both Norwegian and English, and finally [uploaded them] to itslearning". The students were competing against each other trying to make the longest vocabulary list.

This plan requires the students to both master using their phones to take (good) pictures (which can be reused later) as well as being able to transfer the pictures to a new medium (their computer) and there edit them into a PowerPoint presentation combining pictures and text. The fact that they have very limited time as there is a competition going on, would probably reduce time wasted on social media and other online temptations to a minimum. An additional benefit is, as the teacher points out, their increased eagerness to ask for help with

technical difficulties. It might seem like this teacher might have managed to «put» (at least some of) her students within their proximal learning zone (Vygostsky,1978): her student seem to be motivated to push to do their best on their own as well as taking advantage of her assistance (and/or possibly that of fellow students or others) when they reach their limits. Therefore it is likely that this competition promotes both their English competence (building vocabulary) and digital competence (transferring data from one artifact to another, sorting, evaluating and combining data).

## **4.8.6 Writing**

As mentioned earlier, the end product for most of the lesson-plans was to be an oral presentation (presented live or recorded). In the plans in this category the aim was to write. Teacher 26, who is the creator of the first plan here, had short teaching experience and defined digital competence as "To be able to use a computer (in terms of technical knowledge of different programmes), as well as being critical of which sources to use from the internet, and how things should be published or cited". Her plan asked the students to write a text on a topic. The aim was to learn how to cite sources and instruction on how to do this was done by means of colour coding different types of texts on a SMARTboard and discuss these in class. They also watched an "animation on the subject on ndla.no" and discussing "chosen tasks in the animation". Finally, the students are given a task "to write a similar text on a given topic using given web cites. Two and two write together" as the teacher claims "Working in pairs may be more motivating" and they "Learn words/phrases from a fellow student".

Even though both the topic and the sites were given by the teacher, she claimed this was a good way of promoting the students' digital competence, because "Learning the formal set up of citing works will be useful for the following exam, as well as for further studies. The students write the text on a computer, hence develop their technical skills. The students may learn from each other, and it might be less "scary" to write together."

This plan is unique in several ways: it is the only plan where clearly all the reading was done on a screen and the only case where the students read together (i.e. everyone on the whiteboard at the same time). This is also one of few lesson-plans that directly (or indirectly) refers to collaborative writing, though it was not said how the writing was carried out, e.g. whether any digital tools were taken advantage of to facilitate and simplify co-writing or they just sat next to each other. In addition, the teacher in question is the only participant to describe using the SMARTboard as a tool in the classroom in more ways than as a projector.

SMARTboards are interactive whiteboards with touchscreens designed to facilitate collaboration as one e.g. can write directly onto them. Whatever is written (with a finger or with a special "pen") or edited on it during class, can be stored digitally and uploaded to for instance itslearning. In this case the screen had been used to highlight parts of a text and colour-coding it to make a point and get a message across. As very many of the county's classrooms are now set up with this expensive equipment, it is quite surprising that they are only directly mentioned by two participants: the teacher behind the current plan and teacher 17 who included the use of the tool in her description of digital competence: "use the smartboard to watch a film or give info" indicating a usage similar to that of an ordinary projector. Some participants did, as discussed in section 4.6, make general references that might include the tool, e.g. "make use of the different gadgets surrounding us" or "using digital tools to make the lessons better".

Teacher 27 asked her students to fill in an accident report. She has medium experience teaching and described digital competence as "Being able to use a computer for different purposes connected to the subject. Understanding digital media (internet, film, commercials, social media). Critical use of digital media".

"Personal information and other information about the incident " was to be filled in as a test on itslearning using the same tool as was used for the survey for the present thesis. This tool was chosen "to make the situation more authentic and more motivating for the students (because they think it's more fun to fill in information at the internet than to write it in a Word document). In addition, by using the test [she guides] the students through all the elements that are required in the report".

Here she makes her students focus on one part of a report at the time and gradually build on it by writing in text boxes in a test on itslearning. She claims it is more "authentic" and "fun" to work online rather than what she considers to be the option: write in a Word document. By using this technique, she ensures that her students do not forget any necessary parts of a report. On question 10 she remarked: "I don't really see it as a way of promoting digital competence, more like using digital tools to make the lessons better". Seen in light of her lesson-plan, her intended meaning might be that by using the test on itslearning, she makes the task easier to complete for weak students as they are not overcome by the challenge of setting up and writing a whole document in one go, i.e. that filling in one box at the time might be perceived as manageable.

## **4.8.7 Sources**

As seen in many of the plans presented so far, it is common to either provide online sources pre-selected by the teacher and/or ask the students to search for online material themselves. They are then asked to "do research" i.e. search for and select "relevant information" from "good sources" or "reliable sources", study them "with a critical eye", select what is to be included and "comment on the sources" using "proper reference to sources".

In this section two lesson-plans focusing strongly on the doing research and using the findings will be presented. The first plan was provided by teacher 28, who has long teaching experience. She defined digital competence as "It is to be able to use information technology in a critical way". In her suggested lesson plan the main focus is on being able to find reliable sources, i.e. be critical of sources found online by having to state why these sources can be trusted. The students were to research "the gap between rich and poor".

This lesson-plan was intended for a VG1 class at general studies. Her reply to why this was a good way to promote digital competence shows that she most likely had slightly misread the question as she stated that "it is important that students get used to using digital tools in every subject, because this will be valuable when applying for a job. You should be trained in doing all kind of tasks on the computers, the laptops or whatever digital tool you use."

The task itself must have been quite challenging for the students who were let loose on the World Wide Web with few restrictions. Within 90 minutes the students had to find two relevant articles (seemingly without any prior limitations of the search or helpful guidelines beyond the sources having to be reliable and deal with "the gap between rich and poor"), check that the sources in fact are reliable and explain why they are as well as comment on and compare the two articles with respect to content and level of formality, state his or her own view on the content of them, find a "web site about poverty in the world today", close-read in order to explain what it says about "the gap" and possibilities for improvement of the situation as well as comment on the reliability of the website. Just finding relevant and reliable material probably took quite a lot of time: in addition to "just" googling for relevant material, the students must have skimmed at least a few texts in order to choose which two to include. Some of the material might also have included very advanced language which might have become a major time stealer. A "web site" is a rather "unlimited" term and might have lead the students to find rather large collections of information making it challenging to be able to find something to say on reasons for the poverty. The task asks for an explanation for why "this exact part of the world is poor", though it is not said anywhere which part she is

referring to: that piece of information might by accident have been left out in her lesson-plan here or it may refer to whichever location is described in whatever source the students have found. It is not stated where or how these comments, views and evaluations are to be presented afterwards, but whether the results were presented orally or in writing, it would require quite a lot of time to prepare to present the findings in a meaningful way to an audience who would most likely have not read the articles in question and may not be familiar with the chosen website. Whether the students worked individually, in pairs or groups, is not stated either, but whichever was chosen, this must certainly have been a challenging task for the students. It is not stated whether the students were able to finish in time and whether they were given more time than just 90 minutes, though her lesson-plan must be said to be in accordance with her goal of training the students to "use information technology in a critical way".

Teacher 29, also a teacher of vocational classes, suggested a similar lesson-plan. This time the end product was to be a ten minute oral presentation on an ongoing conflict/war, something which is somewhat more limited than the task on "the gap between rich and poor". The presentation should "give the audience a basic understanding of the conflict". As the end result was to be a presentation, the plan could have been included in the category focusing on presentations. Instead it is presented in the section on sources, as the focus is on finding credible information on a current conflict and learning to deal with "conflicting information". The students had to search for and select the sources on their own.

Teacher 29 defined digital competence as "The ability to use computers proficiently. This includes general computer skills, and different types of software (for example Office, iFinger). It also includes the use of internet". By this he meant "how to find and use information from the internet." His students were asked to "Use sources from the internet to gather the neccessary (sp?) information to answer a list of questions provided by the teacher. This should be presented by using a powerpoint presentation". The primary aim for the lesson was to "current affairs\conflicts in the English-speaking world" and in addition "make it clear to the students that not all information on the internet is credible". That he claimed is "especially important when searching for information about current and controversial subjects. The last and least important (or focused upon) goal was to talk about what makes a good powerpoint presentation".

He added that this was a good way of promoting digital competence because "It shows very clearly that not all sources can be trusted. Using the "War on Terror" as an example, you can se quite a lot of conflicting information. This teaches the students to be more critical when using digital aids." It is not clear whether the "War on Terror" is meant as a reference to information on that war in general or to a particular text or activity they have been working on.

## 4.8.8 Practising for life in the classroom

In the lesson-plans discussed in this section, the students are being specifically trained to use software mostly relevant for "life in the classroom" – such as itsl, Skolearena, NDLA and iFinger, a digital dictionary provided for free by the county at the time of the survey and which the students would have to choose to pay for after finishing school in order to continue using. In other cases the students have been introduced to and trained in programs that will be helpful when completing tasks set by the teacher – e.g iMovie, Moviemaker, Photostory and Screencast-O-Matic. The same might be said for presentation software such as Prezi, Power Point and SMARTboard. A short presentation of the various products mentioned has been enclosed in appendix VII, though it is worth remembering when reading this thesis and this section in particular that which software and sites one would expect students at upper secondary school to be familiar with will change over time. In this survey, the teachers showed varying views as to what software they expected their students to be known from before. This will be commented on where relevant.

Though many of these are useful for "life outside the classroom" too, the plans focusing on the use of these have been put in this category, because the plans do not seem to focus on any aims in the English curriculum. There are four lesson-plans in this section.

As described in chapter 2, the county has published lists of skills that all students and teachers should acquire when it comes to digital competence (See section 2.6). One of the teachers' lesson-plans seem to be designed aiming to meet these requirements. The plan was provided by a teacher with long experience who claimed to sometimes take the promotion of her students' digital competence into consideration when planning her lessons, though her lesson-plan indicates that she at least at the start of the schoolyear signals to her students that computers with Internet-access will be an important tool. Her suggested definition of digital competence was as follows: "The ability to use digital programs and applications on various technological devices for daily and professional use." Teacher 30 provided a lesson-plan

which was intended for a first year, vocational class and was to be use at the beginning of the first term. The goal was to ensure that the students "will be able to use word, it's learning, skolearena etc. This includes showing them how basic functions of word works, how to access It's learning, and how to make a folder structure in which to save documents". The tasks she mentions include "to make folders, to save word documents, upload them to It's Learning, to chech their absences on skolearena, and so on".

The software, platforms and tasks mentioned are all part of requirements listed for basic digital competence for students which the county included in the suggested introductory PowerPoint presentation (see section 2.6.4). The teacher stated on question 10 that "It is important for them to learn the basic functions of ordinary programs. They often only have competency in entertainment aspects of the digital world, but if they do not know how to use ordinary, useful programs, they will have problems in their work life." This quote is in line with an ongoing debate as to how digitally competent the students really are and whether or not they are *digital natives*. (See chapter 1 for a discussion of this). The teacher compares the different "worlds" the students face: the one in school (and in the future at work) and the private one. These worlds often require very different types of digital competence. Teacher 30 claims that her students often do not know the programs relevant for other things than "entertainment", i.e. those that are relevant for the students' private lives. It is worth noticing that there in this plan are no references to any aims in the English curriculum. These topics could therefore be taught by any of the teachers the students have.

Another example of preparing for "life in the classroom" was provided by a participant with medium teaching experience who claimed to take the development of her students' digital competence into consideration on a regular basis. Teacher 31 let her VG2 students download Photostory and "play" with the programme "by making a random story in English while learning how to use it". She spent 90 minutes on this as "a prelearning strategy for a vocational project where they used photostory". She stated that this was a good way to promote digital competence because her students used "the computer during the whole session and the programme has many elements that can be used in other digital programmes as well." She had described digital competence as being "able to master digital programmes like power point, photostory etc.", adding that the students should also "be able to search for information on the internet with a "critical eye". Additionally, they should be able to use it's learning in the learning process at school as well as home." Her decision to spend time on letting her students get to know the program as well as referring to it as a "prelearning

strategy" indicates that this is a program that in her experience is not something her second year upper secondary students are familiar with and echoes the thoughts expressed in e.g. the previous lesson-plan: the students are familiar with using computers, but not with the software necessary for schoolwork. As the students were to make "a random story in English" and the task was a "pre-learning strategy", the task was most likely not to be evaluated and it probably did not meet any specific aims in the English curriculum.

Teacher 30 and 31 seem to have taken on the responsibility of teaching the students how to use software that most likely will be necessary in other subjects too. They then give other teachers, who might need the same software in their lessons, more time to spend on reaching aims in their curricula while the English teachers are left with less time to spend on their aims. It is therefore important that digital competence, e.g. learning to use common software, is a duty that all teachers somehow take part in by doing their "fair share".

As mentioned, the digital dictionary provided by the county at the time of the survey, was iFinger. Two lesson-plans were aimed at introducing the students to this tool. Teacher 32, a teacher with medium experience, provided a lesson-plan focusing mainly on teaching the students how to use the dictionary. The digital dictionary, iFinger, was first presented by the teacher. The students were the given "different tasks for them to get to know how to use the dictionary". They worked individually on these, but received support from the teacher if needed. At the end of class the answers were checked and they discussed "what [the students] thought of the dictionary and how it worked."

Teacher 32 defined digital competence as follows: "that you are able to use digital tools to aid in your learning and understanding, and know what types of programmes to use for different tasks, know how to use sources correctly". Her suggested lesson-plan covers the use of a digital tool (iFinger) as well as a discussion of "how it worked". It is, however, not said what the mentioned tasks were or how they were given to the students, though as she states that they, towards the end of class, "went through the tasks", the tasks were probably not interactive.

Teacher 33, who also had medium teaching experience, described digital competence as:

"Digital compentence, in my mind, means that you are able to use digital tools sufficiently in you work\education. It also means that you have an understanding of the limitations that exist in the digital word. I.e bad sources.

For students it more specifically means that they are able to use learning software and writing tools (Office, iFinger), and that they can use the internet to aquire credible information."

He claimed to consider the students' digital competence sometimes when planning his lessons, though the fact that he has spent 90 minutes on teaching his students to use the digital dictionary, it is likely that he will use iFinger and possibly other digital tools quite regularly. He asked his students to use iFinger to help them when they were to "Read a new text, with a reasonable amount of unfamiliar words":

The student read the text, either in pairs, in a group or by themselves. When they are finished, they start writing down, or mark the words they don't understand. After that, they use the dictionary software iFinger, to translate the words into Norwegian.

He claimed that "This both increases their vocabulary, provides the students with new knowledge, and lastly improves their ability to use the dictionary independently".

It is not clear where the "new text" was to be found, e.g. on a paper handout, in a textbook or online. If the text was on paper, the students would have to be able to copy the word(s) letter by letter in order to look them up in the digital dictionary. This would limit how beneficial a digital dictionary would be for students with dyslexia and other reading and writing difficulties compared to an on screen text which would allow them to either just click on the word they want help with or alternatively copy and paste it in order to look it up.

Though both these lesson-plans are designed to teach the students how to use the digital dictionary chosen and provided by the county, it is a well-known fact that many students have Google Translate as their preferred choice of dictionary (as long as their access to the Internet has not been blocked). If the tasks in the first lesson-plan were listed as e.g. a glossary list online (for instance on itsl), there would probably be a high risk that the students simply copied the list and pasted it into Google Translate, which is highly unreliable, but is unfortunately widely used by students as long as they work online. A simple "test" of the program might pose as an example of its unreliability:



Figure 7 Example of Google Translate in use

The screenshot shows the suggested translation into English of a simple sentence in Norwegian including the names of the two different versions of Norwegian which Google translated into "Norwegian and Swedish". The students' use of Google Translate was commented on by teacher 33:

"I believe this is useful because, hopefully, the students can see the purpose of the activity. The students need to be able to use the software when writing exams. As an added bonus it could also show some students why Google Translate is a wolf in sheep's clothing."

The use of the word "hopefully" is likely to indicate that he is aware that his plan might not work out as intended. The last sentence can be read as a statement as to what he thinks they will be doing: use Google Translate rather than iFinger. If the students write the words directly into Google Translate or copy them from a digital document, they are one click away from "completing" the task, though they will have ignored their teacher's instructions and some or many translations will most likely be wrong. In finding their own ways of completing the given task, they do at least show creativity and some level of digital competence. Given the second teacher's use of the word "hopefully" as well as his comment on the software being "a wolf in sheep's clothing" might indicate that the Google Translate option is a problem the second teacher is well aware of, possibly more so than the creator of the first plan for learning to use a digital dictionary. Though, as the first teacher decided to spend time going through the students' translations at the end of class, it might mean that she too is doubtful that the students will do as they are told or it might simply be an activity aimed at clearing up common misunderstandings such as confusing word classes.

# 4.8.9 Cooperating to create a composite text

Teacher 34 was the only one to combine individual work and group work and ask for both a presentation and a written text. She suggested a quite strenuous plan for her student where

they within 90 minutes were to switch back and forth between individual and pair work and between searching for information, sharing it, discussing it and incorporating the gathered information in both a presentation and then to write a composite text as homework.

The plan seems to be very strict on how much time was to be spent on the different tasks and this was probably necessary for the students to get through it all, although it was probably very hard to get through it all in time. By getting her students started by providing the links to sites where they could start their research, she reduced the chances of getting lost or wasting time being indecisive. She let each of her students collect quite a lot of material individually, which were to be combined with other students' findings when they worked in groups. It is not clear how the (possibly extensive) material was shared and/or exchanged. On question she warns "one should not forget that digital competence is not everything - it is a tool, which maya be applied while learning comptence aims in the subjects. It is important that "form" produced with digital means does not take over the content..." This might be an indication that she did not evaluate the "form" of the students' presentations but rather the content of them. As she sees digital competence as a tool, it is possible that sharing of information was done digitally by means of co-writing software.

In her definition of the term digital competence, teacher 6 focused on various types of software relevant for life in the class-room and indicated a variation is software needed according to what subject is being studied. Her definition also mentions being "able to write and publish texts and media" and "find sources on the internet and to evaluate that critically".

Her suggested lesson-plan involves a mix of activities and various types of digital comptence: search on "specified website" to collect information, orally present findings to a group of peers and listen to their presentations, cooperate to make a group presentation based on group-members' findings, practise presenting it and use a digital dictionary as a guide on pronunciation, and finally write individual texts to sum up the experiences working with art. Presumably this was written on a computer.

## 4.8.10 What was not mentioned

While it is important to study what the teachers say directly and indirectly on various topics within the survey, it is equally important and interesting to study what is *not* commented on. Only one of the provided definitions showed an indication that a participating teacher had used Facebook or other social media as a tool in his teaching. Though none of the lesson-plans seemed to include a use of social media for educational purposes, examples of teachers

elsewhere incorporating the use of social media in their lessons have been included in in section 2.5.1. As mentioned, there seems to be two main views of using digital means in the classroom and on the use of Facebook/social media in particular: the lovers and the haters. (See section 2.5). In the news the students' abuse of their access to the Internet (e.g. wasting time on entertainment such as social media, games, Youtube, TV programs, films, blogs, and online newspapers and magazines, etc.) have been given a lot of attention. Various people, among them teachers, school leaders, educational authorities and politicians, have expressed concern that resources and time might be wasted in the classroom. (See section 2.5). Though the local and national authorities seem to be among the lovers, teachers in this survey (at least those who chose to comment on it) seem to take the opposite view as they expressed scepticism, criticism and frustration. Examples of this can be seen in the quotes below:

- 1 Sometimes it is just disturbance, the students are on Facebook instead of working on their tasks etc.
- 2 However, "digital skills" is just one of five basic skills, and I strongly believe that one should always use digital tools critically in the classroom (given how pupils might use the PC for other things than English learning).
- 3 But: It is important to shut down the computer when it is not needed, for intance when I teach grammar or other impotant information, or when they are discussing themes og reading. The scool's rules are very strict in this cases.
- 4 ICT can be useful in learning environments, but students should not be allowed to use their private PC/Mac in class as this so easily enables them to get lost in non-relevant activities (Facebook, Skype, Twitter etc.). Why not re-introduce computer labs or placing 15 PCs in every classroom, all of which shold be specially constructed for learning purposes (i.e. not possible to access social media etc)? (This participant teaches vocational classes where there usually are 15 or 12 students in class depending on whether it is a first or second year class).
- I think students nowadays have great knowledge about computers, but I also think a lot of them lack the ability to use it properly as a tool in school. They are not aware of where they get their information from, and they use sites like *wikipedia* without hesitating.
- 6 It is important for them to learn the basic functions of ordinary programs. They often only have competency in entertainment aspects of the digital world, but if they do not know how to use ordinary, useful programs, they will have problems in their work life.
- [...] evaluating digital sources is an important part of digital competence. Students are therefore asked to state their sources and, in presentations, to comment on them. However, getting them to actually do it is an ongoing project.

8 Learning when NOT to use your own computer, put a limit to its use is also an important skill.

The teacher behind the first quote does not seem to consider the possibility that social media *can* be used as a tool in the process of learning English, but rather sees it as something that is a waste of time and which should be avoided in class. In the second quote a reference is made to "other things than English learning" which might be interpreted as referring to social media and/or online entertainment and a fear that the teacher might lose the students' attention.

In the third quote there is an emphasis on the necessity to log off or "shut down the computer" when it is not used for educational purposes (i.e. "not needed"). It is stated that there at that school are strict rules for the use of computers. This might mean that not following such orders might result in punishment of some sort. The computers seem to not be used whenever the students are to focus on "grammar" and other things considered to be important, and when they are "reading" and/or "discussing things". This might mean that this teacher does not and would not consider using e.g. flipped classroom videos for grammar instruction, and that "reading" is an activity that is not done on a screen. The latter would limit the students' chances of taking full advantage of online dictionaries (e.g. being able to click on words to get them translated or get assistance on how to pronounce or explain them). Other software that can be of great help for especially students with dyslexia and other reading (and writing) difficulties might also be less used. Discussions seem to be limited by time and place, i.e. something that is done in the classroom during class and with your classmates. Logging off removes the opportunities of cooperating with others by getting input and feedback from people elsewhere, e.g. "discussing things" on Facebook with other people at a different location. The need to sometimes log off is supported in the eighth quote. Undoubtedly, it is sometimes both necessary and useful to log off, but should focus on limiting the students' use of their computers become too strong, the consequence might be that the tools' usefulness becomes limited too.

The fourth quote starts off on a positive tone as he accepts that "ICT can be useful in learning environments", before he expresses a view similar to the one in the first quote as he points to the dangers of students getting "lost on non-relevant activities" naming Facebook, Skype and Twitter as examples. His suggested a solution is re-introducing computer labs with PCs on which the access to social media has been blocked.

Some teachers expressed fear of the future consequences of some students' limited digital competence. The fifth quote shows concern that the students do not have the right type of digital competence, i.e. the tools needed for schoolwork such as searching for information. In the sixth quote there is also a reference to a lack of knowledge of "basic functions of ordinary programs" compared to "competency in entertainment aspects of the digital world". The teacher expresses fear that this will cause "problems in their work life". Letting the students loose on the Internet, reduces the teacher's possibilities to control who reads what as well as check the quality of the information the students build their knowledge on. The seventh quote points to a certain frustration trying to make the students critically evaluate their choice of online sources of information, while the fifth quote points specifically to Wikipedia as one of the sites the students trust "without hesitating".

While Facebook and social media were mentioned by some as unwanted and problematic distractors, Youtube was not. The reason for the lack of criticism might be that Youtube is also used for educational purposes by the teachers themselves, though only one teacher mentioned it in her lesson-plan. Neither were there any complaints about students wasting time on Snapchat on their Smartphones. Though cell phones might sometimes work as a practical plan B when the students' PCs or Macs for some reason stop working (e.g. virus attack, forgotten/lost/stolen/broken charger, lost access to the net for inexplicable reasons), they are usually the students' prime source of entertainment. Though it might be relevant to question whether or not the teachers are aware of how much time their students spend on the highly addictive Snapchat app. This app, which has been available since September 2011, is accessed on the phones which makes it easier for the students to "secretly" spend time on Snapchat without the teacher noticing if they put the phone under their desk, behind a book or cover it with a piece of clothing such as a cap, etc.. One potential explanation might be that there is general consent among teachers that cell phones should not be used in class. Though there is not a ban on using them in the county's school regulations, it is clearly stated in §3 that it is up to the teacher to decide which tools should be used in class and that all tools should be used in such a way that learning is not interrupted or prevented (HFK/Hordaland, 2014)<sup>11</sup>. On Skolearena, where the teachers fill in their log on students' absence and remark on their behaviour, there is a tab for remarks for (illicit) use of cell phone in class indicating that cell phones are generally not to be used in class. On the other hand, in the survey one

<sup>&</sup>lt;sup>11</sup> Due to HFK updating their pages this link is currently deactivated, deleted or has been moved

participant viewed cell phones as useful tools when learning English rather than purely sources of entertainment and a competitor for the students' attention.

In the next and final chapter, the findings in the survey will be summed up, the research evaluated and suggestions for further research will provided.

# **4.9 Question 11**

Question 11 was the last question and gave the participants a final opportunity to provide "any comments related to the questionnaire or anything else [they] might have thought about while answering the questions". This was mostly left unanswered (11) or phrases such as "No", "Not really©". "No comments" and "Nope" were used. Others finished off with a greeting such as "Good luck!". All in all, this question did not provide any new information in 25 of the cases. Some did however wish to comment on either the survey or their previous answers. A few also chose to send a message on itslearning after completing the survey. In these messages they expressed distress concerning their lack of ability to answer my questions stating that they felt a need to read up on the subject of basic skills and digital competence in particular: «Hmm, I see now that I have to read up in this...». No one withdrew their answers after completing the survey. As mentioned earlier, one teacher apologized on number elevene that she «Did not have time to complete this...» (my translation). Another correctly observed: "I am not sure whether you prefer the answers in English or Norwegian, howeve, since you asked them in English I prsumed you preferd English answers:) ".

# **Chapter 5: Conclusions, limitations and further research**

## **5.1. Summary of the results**

The main aims of this thesis was firstly to investigate how digital competence is understood by English teachers in upper secondary schools in Hordaland County, and secondly what sort of digital competence they promote in their teaching as demonstrated in a lesson-plan of the teacher's choice. Their definitions and plans were compared to the views and instructions given by the national and local educational authorities.

The material consisted of 39 responses to a survey. A clear majority, 85 per cent of the replies, came from English teachers at vocational schools. 67 per cent of the participants taught vocational classes only and 18 per cent taught both vocational and general studies classes. Less than one in five of the participants were male. As a result, it was not possible to point to any differences based on gender, and there was not enough material to compare the responses from teachers at vocational studies with those at general studies.

About one in four of the participants had short experience teaching. The participants were neither asked about their age nor when they qualified as teachers. It is, however, likely that the teachers with short experience are fairly young and quite recently educated, i.e. after the introduction of K06. It was initially expected that these would be the ones who would remember to mention all the basic skills and be most strongly focused on including the basic skills in their teaching as they were among Prensky's digital natives, and in addition probably had been studying the most modern curriculum in teacher education. It was not possible to confirm this. Though, as mentioned in chapter 4, the lesson-plans which required the least advanced digital competence were contributed by teachers with short experience. However, this group was also represented when it came to using a wide variety of modern software (Screencast-O-Matic, Photostory, iMovie,etc.) as well as using modern equipment such as SMARTboards in other ways than just as a projector.

In section 4.6 the teacher's definitions of digital competence were presented and discussed. Most of the teachers defined the term in a school setting. There was a clear focus on being able to use digital tools to search for information and to write schoolwork. There was also a very "self-centered" focus in the sense that the definitions might be interpreted to mainly include references to students working individually with their schoolwork such as preparing and making presentations, writing hand ins. There was very little mentioning of e.g. social

media, digital judgement beyond assessing the reliability of sources, netiquette, digital collaboration, etc.

In a majority of the plans, the end result was to be a presentation of some sort. PowerPoint was mentioned as the preferred tool for presentation with Prezi as the second most common. In the plans the students were asked to work individually or in pairs/groups. Sometimes the students were asked to switch between individual work and cooperation. The students were sometimes asked to find their own topic and research for sources themselves, and in some plans the teacher provided both the topic and the resources to varying degrees.

Many plans clearly stated that the students should work individually, while in other plans it was not entirely clear whether the students worked on their own or in pairs/groups. Only a few plans required the students to collaborate in pairs or in groups. It was, however, not revealed in the survey how this cooperation was carried out. No plans required cooperation with people at a different location.

In chapter 3 when discussing the choice of instrument, a hope was expressed that by asking the participants to write down their answers to the questions, they would reflect on their answers and possibly their knowledge and praxis. A few participants added comments that might suggest that the writing had this effect. One teacher added that "it made me think about whether my understanding of "Digital competence" is a "correct" understanding and wonder how others work with this actively in less obvious ways than my examples."

# **5.2 Digital challenges**

### 5. 2.1 Recorded presentations

In a few plans the teachers had chosen a recorded presentation as the end product. Recording presentations has many benefits. One benefit is that one avoids the students having to listen to a long list of usually very similar presentations in class or alternatively the teacher having to leave more or less whole classes to themselves while the teacher listens to (shy) students' individual presentations to the teacher only. Another benefit is of course that all the students will be active simultaneously as they all have presentations to prepare for the same deadline. When the presentation is recorded, the teacher can (easily) listen more than once to each presentation and can therefore give more detailed feedback in order to help them improve future presentations. A recorded presentation also makes it easier to get a second opinion from

another teacher on the evaluation of it. In addition, by not spending time in class listening to the presentations, there is more time left for other activities or for presentations on other topics giving the students more opportunities to improve. The drawbacks are of course that one cannot have an immediate dialogue about the presentations and the individual student does not get feedback from a (live) audience. Furthermore, recording the presentations will also limit the students' opportunities to improve their future presentations by "borrowing" ideas from peers. On the other hand, using such a tool also gives the students the opportunity to try as many times as they have time for, and as a consequence being nervous when presenting becomes less of a problem for some. An additional benefit for the students might be that they will probably listen to their own recordings and thereby might realise what they need to improve without anyone having to tell them.

### 5. 2.2 Introductory instruction on digital competence

The participating teachers did not seem to have a unified view of what software the students are expected to know when they start upper secondary school. Some spent an entire double lesson teaching them about fairly commonly used tools such as Word, itslearning, and Skolearena. Other teachers let students play with software such as Photostory in order to become familiar with it. Some teachers seemed to expect their students to be familiar with these platforms and programs and simply asked their students to use various tools to produce the required text, film or visual presentation. Some participants opted for something in between and helped those students who asked for instruction on how to do the operations. What is clear, however, is that many teachers are aware that not all students have the relevant knowledge to take advantage of the tools they are commonly requested to use for schoolwork. It is therefore clear that some sort of training should be offered. As mentioned in section 4.8, it should not be up to the individual teachers to take on this responsibility, and they should not have to do this alone. All teachers should do their fair share, if not there is a risk that a considerable amount of the very limited time for English lessons will be spent teaching students how to use software which is likely to be relevant in many subjects. The introductory courses, initial, practical assistance and training should be a joint effort among the teachers e.g. by teaching one defined part each or by setting up introductory workshops for students at the beginning of the first term to ensure that all students download and get to know the most commonly used software and platforms. Flipped classroom videos might also be an option. The teachers would though need to somehow check that they are being watched and the software is being successfully downloaded, tried out and that the students have understood

how to use them. As explained in chapter 2, this is something the county has thought of and has therefore developed an introductory PowerPoint presentation which is updated every year. The most recent version consists of 46 slides. It is most likely neither sufficient nor very useful as the students need to not only be lectured on what to do and not do. There is a need for instruction on how to actually download and start using the software as well as access to practical assistance. In addition to this, netiquette should be focused on. It is not likely that a long PowerPoint presentation covering the subject will have noticeable effects.

#### 5.2.3 Using the digital dictionaries/translation programs

Two participants focused in their lesson-plans on teaching the students how to use the digital dictionary iFinger selected and provided by the county. There were however indications that the students might attempt using other dictionaries/translation programs, especially Google Translate. It is worth noticing that if using the "wrong" dictionary *is* a problem, it might (to some extent) be a preventable one: iFinger, though it can be used online, is supposed to be downloaded onto the students' PCs and Macs. The reason for downloading is that it makes it available during tests and (mock) exams when access to the Internet so far has been blocked. This makes it important for the teacher to think carefully through his or her choice of teaching tools and methods. Here that might mean e.g. blocking the net with Tigru after checking that the students have downloaded iFinger. The use of Tigru for this is, however, not fool proof as the students can still choose to use other networks than the one provided by the school and thereby avoiding being blocked. No Internet access will probably increase the use of the "right" dictionary for tasks set by the teachers Thus, the teacher must keep the necessity of class management in mind for the lesson-plan to work out (see section 2.5).

This battle to control the students' choice of dictionaries is a part of a bigger battle: the attempt by teachers with the county's support at keeping control in the classroom by using tools which might let the teacher remain in charge of what is going to be worked on, in which order and by means of which tools resulting in a product decided by the teacher. This is a battle that the teachers are destined to loose and which they probably should loose. The new tools, smartphones, tablets, computers, Google apps, etc. and the never ending development of new tools and new software means that whenever the county and the teachers get access to a new way of controlling the students' digital behaviour such as the invention of Tigru and Testmode in itslearning, the students will soon discover or will already have discovered ways to circumvent such restrictions. Students have for instance in the past year figured out how to avoid having their screens locked to tests opened in Testmode. As discussed in section 2.5.5,

the rules for which tools are and are not allowed during written exams have recently been altered. Previously all Internet access was banned on the day of the exam. This year, however, Hordaland County has preapproved seven websites which will not be blocked during the exam, but there is still a ban on accessing other sites, using other means for communication e.g. cell phones and using translation programs. Allowing access to these seven online resources might be seen as a first step towards allowing free Internet access during exams, which will consequently lead to a need for new types of exam tasks. I believe that in the future, full Internet access will have to be allowed on the day of the exam. The alternative will be to continue a battle for control of tools used. A similar battle is currently being fought being at various driving schools where it has been revealed that students have been cheating by using means of communication in order to pass written tests. If the way exams and tests are set up and designed and what we consider as relevant competence is not altered, there will be an ever increasing need for more and more items to be forbidden. An example might be the University of Stavanger's recent ban on wristwatches during exams as the supervisors are not sure they will be able to spot which watch is a SMARTwatch and a tool for communication (and cheating) (Hansen & Jåsund, 2016). If we are to continue the fight to keep control of tools used during exams and tests, we might end up in situations similar they have at a military academy in India. There the candidates have to sit in a field, wearing only their underwear and write their answers with a pen on paper (Guardian, 2016). If full Internet access during exams is allowed in the future, there will be a need for other ways of evaluating students to be developed and we will have to focus on other competences than we do now. In the current survey, very many plans asked on students to work individually. I believe this will change and that it is not a matter of if, but of when collaboration will be part of what will be assess both in class and during exams.

### **5.3 Limitations**

In all research there is always room for improvement, and this thesis is no exception. The researcher's desires must be weighed against and compared to the limitations of time and resources as well as the space available to present the results. One alternative approach might have been interviewing (some of) the teachers possibly in combination with observations of lessons. This was also suggested by a teacher who had misread or misinterpreted some of the central questions in the survey (e.g. number 10 was read as if asking for reasons to teach digital skills). She therefore took the opportunity to question the whole survey when

encouraged to comment on whatever she liked on question 11: "I was wondering what you actually want to investigate - the questionnaire seems to be rather trivial. You do not ask about anything essential and concrete... And if you want to look into the actual work with digital literacy then qualitative study with obervation of lessons and interviews with teachers and students would have been more appropriate than a questionnaire."

I did, however, choose to use an online survey with a mix of open and closed questions as an instrument to collect the material. Follow up questions via the messaging system on itslearning was to be used if deemed necessary to clarify any vague parts in the responses. This would be possible to do as the survey was not anonymous. However, this proved impossible to carry out as it turned out that the participants did not reply. Choosing this instrument might therefore have been a limiting factor to some extent.

Parts of the data have been presented in manners typical of quantitative research rather than qualitative, while the largest parts, i.e. the answers to the open questions, were mainly analysed and commented on as they were presented. Here the results may have been influenced in some ways as the researcher is also a teacher of English at the same level in the same county as the participants. One potential effect of this may have been the way the answers have been understood and analysed. There will always be a risk that the researcher's own background and experiences may influence the reading and interpretation of the material. However, studying the participants' answers repeatedly and attempting to keep an open mind to different ways the material could be understood, have hopefully reduced this potential influence to a minimum. The researcher being a fellow English teacher in the same county as the participants combined with the survey not being anonymous might also have affected how many answers were provided and by whom. It is therefore possible that an "external" researcher might get different results.

The answers to the open questions have been quoted unedited as far as possible. In addition the complete set of answers to questions seven, nine and ten have been included in the appendices. The original language- mistakes have not been removed in order to give the reader the best possible opportunity to judge for himself/herself whether the researcher's interpretations and analyses are valid. As a consequence of not editing them, it becomes clear also to the reader that although the answers were written by English teachers, the quotes contain quite many spelling and grammar mistakes. As the respondents are all teaching upper secondary students of English, there is no reason to suspect that the frequency of errors is due

to a lack of knowledge of the language. The errors are most likely the result of the answers being written in a hurry. This might be viewed as an indication that the participants did not deliberate their answers as carefully as expected and therefore given the impression that the results can therefore not be trusted. On the other hand, the opposite might be the case: it might be evidence of the answers being "back bone responses" and therefore closer to the truth than if the teachers had taken more time when providing answers. Though the amount of mistakes as well as the missing necessary pieces of information in the answers, made it challenging to interpret and analyse them. Therefore some of the participants' intensions might have been misinterpreted.

In the survey, the participants were asked to provide *one* example of their lesson-plans. This is a limitation in itself as there is no way of knowing what a second or third plan from each participant might have revealed. Furthermore, the time of year the survey was carried out might have affected the results. The teachers were asked to provide a previously used plan. As they did not have access to their archives online or on their computers due to the use of Testmode, it is likely that they chose a plan they had recently used and therefore remembered.

A few of the questions turned out to function as limitations to some extent. If this survey were to be repeated, a few improvements should be carried out. Question 10 was repeatedly misunderstood by the participants and did thus not provide the desired information. It should therefore be rephrased. Furthermore, it might be fruitful to ask the participants to state their age and/or when they became qualified teachers. Having more specific information on their background might be helpful when analysing their other answers.

### **5.4 Further research**

#### 5. 4.1. Evaluating sources and citations

There was a rather strong focus on finding, evaluating and stating reliable sources as well as using correct citations. As explained in chapter 2, searching for reliable sources, evaluating, stating and citing sources is something that is always required of the students in the written exams. In chapter 4 it became clear that this was focused on in many of the lesson-plans and mentioned in many definitions. Behind the demands in the exams and in the lesson-plans there seems to be some kinds of underlying standards against which the students' products are evaluated against regarding sources and citations. However, these standards for what is to be considered as e.g. "reliable" sources and "proper" citations were not revealed in the survey

and the survey was not aimed at doing that either. In the preparation and exam booklets the students are always reminded on the initial instruction pages that any citations should be marked and all sources should be stated so that "the reader can find them", but this is not specific enough to decide whether a student's text is average, below or above average when it comes to the use of sources and citations. How exams are evaluated might give clues and create a standard, though the guideline provided by Udir is not very clear on this. Research should therefore be carried out to investigate whether teachers both locally and nationally have a unified view on this.

Only two lesson-plans involve use of other types of new technology than a computer (i.e. cellphones and SMARTboard), though some teachers mentioned other digital equipment than computers in their definitions. This seems to be a very low number. As mentioned in chapter two, there are currently a lot of projects regarding digital competence going on in the county (see HFK/Læring in Hordaland). Among these are projects new tools, such as iPads, are being tried out. Though none of these projects are currently focusing on the teaching of English, they might inspire English colleagues to try out new methods, tools and approaches. In addition, new tools have been made available this year as the county now provides Google apps for all teachers and students. This software facilitates collaborative writing which might therefore become more common in the future. More research needs to be carried out in order to follow up possible, resulting developments.

There is no doubt that the field of digital competence is under constant development. It is, however, hoped that this thesis has shed some light on the current situation in a small part of the picture: English classrooms in Hordaland County. To my knowledge, there has not been carried out similar research in any of the other counties. Repeating the study in one or more counties and comparing the findings with each other as well as mine might therefore be two alternative routes of action.

Only a few of the many possibilities regarding further research have been mentioned so far and many will have to be left out. I will, however, conclude this thesis by considering how the work done here could be developed further. One important part in the development of digital competence in the English classrooms in Hordaland has so far been left out: The local leaders at the different schools. The leaders and their priorities made at the individual schools have so far not been considered. Their understanding of what digital competence involves or lack

thereof might have been influential. Including this information in future research might alter the picture to some extent.

### References

- Ansteensen, N. (2012, 21<sup>st</sup> May). Internet forstyrrer undervisningen. Retrieved from https://www.utdanningsforbundet.no/Hovedmeny/Videregaende/Fag-og-utdanning/Studieforberedende/Internett-forstyrrer-undervisningen/
- Bell, J. (2010). Doing your research project: a guide for first-time researchers in education, health and social science. Maidenhead: Open University Press.
- Belshaw, D.(2012). The essential elements of digital literacies: Doug Belshaw at TEDxWarwick. [video].Retrieved from https://www.youtube.com/watch?v=A8yQPoTcZ78
- Breivik, J. (2015). Læring i en digital tid. Bergen: Fagbokforlaget.
- Blikstad-Balas, M. (2012) Digital Literacy in Upper Secondary School What Do Students Use Their Laptops for During Teacher Instruction?. *Nordic Journal of Digital Literacy*, 2012, Vol.7(02), 81-97
- Creswell, J. (2010). Educational Research (Third Edition). Boston: Pearson Education Inc.
- Erstad, O. (2010a). Digital kompetanse i skolen en innføring. Oslo: Universitetsforlaget.
- Erstad, O. (2010b). Education the Digital Generation. *Nordic Journal of Digital Literacy*, 2010, Vol.5(01), 56-72
- Ertesvåg, F., Sandblad, M. (2014, 13<sup>th</sup> August). Sosiale medier stjeler skoletimene. *VG*.

  Retrieved from http://www.vg.no/nyheter/innenriks/skolestart/sosiale-medier-stjeler-skoletimene/a/23272740/
- Ertesvåg, F (2014, 26th September). Går løs på elevers latskap. *VG*. Retrieved from http://www.vg.no/nyheter/innenriks/skolestart/sosiale-medier-stjeler-skoletimene/a/23272740/
- Franson, L., Gilbrant, J.M., & Meldalen, S.G.(2012, 17th January). Vil at Allah «ødelegger» kronprins Haakon og at det skal være smertefullt. *Dagbladet*. Retrieved from http://www.dagbladet.no/2012/01/17/nyheter/demonstrasjon/krigen\_i\_afghanistan/ute nriks/19829233/
- Gibbs, G.R. (2007). Analyzing Qualitative Data. London: SAGE Publications Ltd.
- Glasbergen Cartoon Service. (n.d.). Retrieved from www.glasbergen.com and used with special permission.
- Hagelia, M.(n.d). Hvordan bruke Facebook i klasserommet. Retrieved 19<sup>th</sup> April 2016 from

- https://dataskole.wordpress.com/sosiale-medier/facebook/hvordanhvorfor-bruke-facebook-i-klasserommet/
- Haltevik, O.E., Christophersen, K. (2012). Digital competence at the beginning of upper secondary school: Identifying factors explaining digital inclusion. doi:10.1016/j.compedu.2012.11.015
- Hansen, K., Jåsund, C.(2016, 12<sup>th</sup> May). *NRK*. Retrieved from http://www.nrk.no/rogaland/studentene-far-ikke-ha-klokke-pa-eksamen-1.12940475
- Heimdal, M. (2010, 1<sup>st</sup> June). Facebook i norsktimen. *Drammens Tidende*. Retrieved from http://www.dt.no/nyheter/lier/nyheter/facebook-i-norsktimen/s/2-2.1748-1.5339469?null
- HFK/Hordaland<sup>12</sup>.(2014, 1<sup>st</sup> August) Ordens og adferdsreglement. Retrieved from http://www.hordaland.no/globalassets/dokumenter/ordens-og\_atferdsreglement\_1.\_aug\_2014.pdf
- HFK/Hordaland<sup>13</sup>. Etiske retningslinjer. Retrieved from http://www.hordaland.no/upload/handbokfolkevalde/Etiske\_retningsliner\_HFK.pdf
- HFK/Innsida. (2011, 19<sup>th</sup> September) Bruk av sosiale medium i HFK. Retrieved 19th April 2016 from http://innsida.hfk.no/A-til-Aa/Publisere-pa-nett/Bruk-av-sosiale-medium-i-HFK/
- HFK/Kæring i Hordaland. (2015). Nettbrett i Kroppsøving.Retrieved 20th December 2015 from https://www.laringihordaland.no/vov/kroipad/
- HFK/Læring i Hordaland (2016a). Digital grunnkompetanse. Retrieved 29<sup>th</sup> April 2016 from https://www.laringihordaland.no/digital-grunnkompetanse/
- HFK/Læring i Hordaland (2016b). Elevsuperbrukere og Surface pro 3 som elevpc. Retrieved 28<sup>th</sup> April 2016 from https://www.laringihordaland.no/auv/elevsuperbrukere/
- HFK/Læring i Hordaland. (2016c). Facebook i skulen. Retrieved 19<sup>th</sup> April 2016 from https://www.laringihordaland.no/digital-grunnkompetanse/verktoy/facebook-i-skulen/
- HFK/Læring i Hordaland (2016d). Startkurs for nye elever. Retrieved 28<sup>th</sup> April 2016 from https://www.laringihordaland.no/digital-grunnkompetanse/informasjon/skulestart/
- HFK. (2013). Styringsdokument for det pedagogiske utviklingsarbeidet ved dei vidaregåande

-

<sup>&</sup>lt;sup>12</sup> Due to HFK updating their pages this link is currently deactivated, deleted or has been moved.

<sup>&</sup>lt;sup>13</sup> Due to HFK updating their pages this link is currently deactivated, deleted or has been moved.

- *skolane* 2013-2015. Bergen: Hordaland Fylkeskommune. Retrieved from http://docplayer.no/11198243-Styringsdokument-for-det-pedagogiske-utviklingsarbeidet-ved-dei-vidaregaande-skolane.html
- ICILS. (2013). Preparing for Life in a Digital Age: The IEA International Computer and Information Literacy study. Retrieved from http://research.acer.edu.au/cgi/viewcontent.cgi?article=1009&context=ict\_literacy
- IKTSenteret. (n.d.). *The Norwegian Centre for ICT in Education*. Retrieved from http://iktsenteret.no/english
- Krumsvik, R. (2007). Skulen og den digitale læringsrevolusjonen Oslo: Universitetsforlaget.
- Langseth, J., Lundgren H. & Skanke J. L.(2007). Workshop 2. Oslo: Gyldendal
- Li, Y., Ranieri, M. (2010). Are "digital natives" really digitally competent?- A study on Chinese teenagers. *British Journal of Educational Technology*. Doi:10.1111/j.1467-8535.2009.01053.x
- Ministry of Education and Research. (2004). *Culture for Learning*. Report No.30 to the Storting. Oslo: Ministry of Education and Research. Retrieved from http://www.regjeringen.no/nb/dep/kd/dok/veiledninger\_brosjyrer/2004/report-no-30-to-the-storting-2003-204.html?id=419442
- Murtnes, S. (2011, 9<sup>th</sup> December). Forbyr lærere og elever å være "venner" på Facebook. *VG*. Retrieved from http://www.vg.no/nyheter/innenriks/skole-og-utdanning/forbyr-laerere-og-elever-aa-vaere-venner-paa-facebook/a/10040552/
- Nilsen, D. (2012, 10<sup>th</sup> February). Lærer fikk sparken etter voldsfilmer og Breivik-uttalelser. *VG*. Retrieved from http://www.vg.no/nyheter/innenriks/laerer-fikk-sparken-etter-voldsfilmer-og-breivik-uttalelser/a/10043303/
- Norwegian Directorate for Education and Training (2006). English Subject Curriculum. 14
- Norwegian Directorate for Education and Training. (2010, 24<sup>th</sup> June). English Subject Curriculum. <sup>15</sup>
- Norwegian Directorate for Education and Training. (2012, 11<sup>th</sup> January). Framework for basic skills, Retrieved from http://www.udir.no/PageFiles/66463/FRAMEWORK\_FOR\_BASIC\_SKILLS.pdf?epsl anguage=no

<sup>15</sup> Paper version received from the Directorate for Education and Training. No longer on the Internet.

.

<sup>&</sup>lt;sup>14</sup> Paper version received from the Directorate for Education and Training. No longer on the Internet.

- Norwegian Directorate for Education and Training. (2013, 23<sup>rd</sup> June). English Subject Curriculum. Retrieved from http://www.udir.no/kl06/eng1-03/Hele/?lplang=eng&read=1
- NTB<sup>16</sup>. (2011, 22nd August). Lærerne må lære å bruke Facebook. *Adressa*. Retrieved from http://www.adressa.no/nyheter/innenriks/article1681939.ece
- Online College (2012). 99 Ways You Should Be Using Facebook in Your Classroom. Retrieved 19<sup>th</sup> April 2016 from http://www.onlinecollege.org/2012/05/21/100-ways-you-should-be-using-facebook-in-your-classroom-updated/
- Oxford Dictionaries. (n.d.)

  Retrieved from http://www.oxforddictionaries.com/definition/english/quantitative
- Pedagogisk Praksis. (2010). *iPad i Barnehagen*. Retrieved from http://www.pedagogiskpraksis.no/ipad-i-barnehagen/
- Pinkard, N. (2013, 13<sup>th</sup> February). *Nichole Pinkard on Digital Literacy (Big Thinkers Series)* [Video file]. Retrieved from https://www.youtube.com/watch?v=Aya43MnWTxQ
- Prensky, M. (2001). Digital Natives, Digital Immigrants. On the Horizon, October 2001,
  - 9 (5). Lincoln: NCB University Press
- QRCA. (n.d.)

  Retrieved from http://www.qrca.org/?page=whatisqualresearch
- Ringseth, B.(2012, 10th April). Bruker Facebook i undervisningen. *Adressa*. Retrieved from http://www.adressa.no/student/article1683155.ece
- Rogne, M. (2009). Læreboka ein garantist for læreplannær undervisning? *Acta Didactia Norge*. Vol.3, No.1, Art.11.
- Rogne, M. (2008). Omgrepet tekst i skulen ei tverrvitskapleg tilnærming. *Norsk pedagogisk tidsskrift*. Vol. 93, No. 03, 234-247.
- Skog, B. (2012, 13th February), Lærere på Facebook. Retrieved from http://forskning.no/content/laerere-pa-facebook
- Skulstad, A.S. (2009). The Need for Rethinking Communicative Competence. In R. Krumsvik, (Ed.), *Learning in the Network Society and the Digitized School* (p. 255-267), New York: Nova Science Publishers

\_

<sup>&</sup>lt;sup>16</sup> No author 's name given for article in *Adressa*.

- Slettholm, A., Svarstad, J., & Færaas, A., (2014, 14<sup>th</sup> January). PC-bruk i timene: Facebook, spill, blogger, chat, nettaviser og litt fag. *Dagbladet*. p. 6, part 1.
- Statistics Norway. (2003). Retrieved from http://www.ssb.no/en/teknologi-og-innovasjon/statistikker/ikthus/aar/2003-11-06
- Statistics Norway. (2006). Retrieved from http://www.ssb.no/en/teknologi-og-innovasjon/statistikker/ikthus/aar/2006-09-14
- Statistics Norway. (2014). Retrieved from http://www.ssb.no/en/teknologi-og-innovasjon/statistikker/ikthus
- Tjora, A. (2010) Kvalitative forskningmetoder i praksis. Oslo: Gyldendal.
- The Guardian<sup>17</sup>. (2016, 1<sup>st</sup> March). *The Guardian*. Retrieved from http://www.theguardian.com/world/2016/mar/01/indian-army-candidates-made-to-take-exam-in-underwear
- Utdanningsforbundet, (2012, 10<sup>th</sup> September), IKT og arbeidsmetoder. Retrieved from https://www.utdanningsforbundet.no/upload/Rapport%20IKT%20VGO%20studiespes %202012.pdf
- Vigsnæs, M.K. (2013, 29<sup>th</sup> December), Unge Høyre vil slutte å gi PC til alle elever. *Dagbladet*. Retrieved from http://tablet.dagbladet.no/2013/12/29/nyheter/samfunn/skole/politikk/unge\_hoyre/310
- Vygotsky, L. (1978). Interaction between learning and development. Retrieved from http://www.psy.cmu.edu/~siegler/vygotsky78.pdf VYGOTSKY 1978

\_

<sup>&</sup>lt;sup>17</sup> No author stated.

# **Appendices**

## List of appendices:

Appendix I Letter of approval from the NSD

Appendix II Invitation to take part in the study

Appendix III Questions for the participants (the teachers)

Appendix IV Answers to question 6

Appendix V Answers to question 7

Appendix VI Netiquette for teachers in Hordaland

Appendix VII Specific platforms, software and sites mentioned in the lesson-plans

Appendix VIII Preapproved websites for use during exams in Hordaland County

Appendix IX Answers to question 6, 7, 8, 9, 10 and 11

Appendix X Pedagogical focus in Læring in Hordaland

#### Norsk samfunnsvitenskapelig datatjeneste AS

MORWEGIAN SOCIAL SCIENCE DATA SERVICES



Handa Harhigen gares 29 is SHCF Bergers Harvary Fair HF SS 58 7Y 107 fair HF SS 58 05 50 malfill sub-mo www.mot.ub-mo tag.nv. 905 327 3844

Aud Solbjurg Skulstud Institutt for ferminedsprikt Universitetst i Bergen Sydnesplassen 7 5007 BERGEN

Viriano 31.063813

Virial 2008 (31797)

Dees Mo

Design of

#### TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, momet 05.06.2015. Meldingen gjelder prosjektet:

34691

Stadent

Old days seaching new trickel How do apper secondary English teachers

define digital competence? How is their understanding of the term reflected

in their reaching!

Behandlingsannurlig

Universitates i Bergen, val institutionens averste lader

Daglig annowing

And Solbjerg Skalitad Besodokte Kjerrgled Henne

Petronvernembudet har wardert prosjektet og finner at behandlingen av personopplynninger er meldepliktig i harhold til personopplynningsloven § 31. Bahandlingen tilfretlastiller kravene i petronopplynningsloven.

Personvernombuden vordering forstrutter at prosjekter gjernomføres i tritd med opplynningere gitt i meldeskjemset, komupondanse med ombudet, ombudets kommentaret samt personopplynningsloven og halarngjaterloven med forskrifter. Behandlingen av personopplynninger kan settes i greg.

Der gjenns oppmarksom på at det skal gis ny melding denom behandlingen endres i frehold til de opplysninger som lagger til grunn for personvernombuden vurdering. Endringsmeldinger gis vis et eget skjenns <a href="http://www.nad.uih.no/pamonvern/meldepilki/skjemn.html">http://www.nad.uih.no/pamonvern/meldepilki/skjemn.html</a>. Det skal også gis melding etter tre är dersom prosjuktut fortuat pågår. Meldinger skal skje skniftlig til ombudet.

Personvernombadet har lagt at opplyminger om possjektet i en offundig database, http://pwa.nsd.no/protickt.

Personversombudet vil ved prosjektets avalutaing, 14.12.2014, ratte en henvendelse anglende status for behandlingen av personopplysninger.

Vergräg hilsen

Vigna Namvedi Kvalheim

Hiday Thorangum

Hildur Thomosyssen tif: 55 56 26 54

Vedlegg: Prosjektvurdering

Kopi Bmedike Kjergled Hesne, Nordshi Bolismova 12 B, 9094 BERGEN

State of the Control of the Control

### Personvernombudet for forskning



Prosjektvurdering - Kommentar

Prosjektur: 34691

Ifeige prosjektmeldingen skal det innhentes skriftlig samtykke basert på skriftlig informæjon om prosjektet og behandling av personopplysninger. Personvenombudet finner informæjonsskrivet tilfredsstillende utformet i henhold til personopplysningslovens vilkår, såfremt veileders navn og kontaktinformæjon tilføyes.

Prosjektet skal avsluttes 14.12.2014 og innsamlede opplysninger skal da anonymiseres.

Anonymisering innebærer at direkte personidentifiserende opplysninger som navn/koblingsnækkel slettes, og at indirekte personidentifiserende opplysninger (sammenstilling av bakgruansopplysninger som f.eks. yrke, alder, kjønn) fjernes eller grovkategoriseres slik at ingen enkeltpersoner kan gjenkjennes i materialet.

#### Appendix II: Invitation to take part in the study

This was published on the front page of the test on itslearning:

NB! Please read this before starting the "test".

#### Invitation to take part in a study at the University of Bergen.

As a student at UiB, department of foreign languages, I am going to write a master thesis in didactics. The aim of my study is to analyse English teachers' knowledge and understanding of basic skills, and compare it to teaching practises as well as the authorities' definitions of the terms. By *English teachers* I mean those who teach English at first year General studies (VG1 Studieforberedende) and/or at VG1 and/or VG2 Vocational studies (VG1/VG2 Yrkesfaglig studieprogram) this year or last year.

Participation is voluntary, but would be much appreciated. There are 11 questions in all. In the first two questions you will be asked to confirm that you have read this information and that you are willing to take part. The rest of the questionnaire consists of a mix of multiple choice questions and open questions.

Please note that the collection and storing of the data will <u>not</u> be carried out anonymously. The reason for this is that I would like to be able to contact individual participants in order to clarify some of the answers to the open questions if necessary. Should there be a need for that, I will send a message on It's Learning to the relevant person(s).

Please note that you can only move forward and therefore should make sure your answer is complete before clicking on "Send".

If you start answering the questionnaire and have second thoughts, you may quit at any point without any questions being asked. I will then delete whatever answers you have already provided. Should you choose to withdraw your answers after completing and submitting the questionnaire, please contact me on the e-mail address below, and I will delete your answers.

The collected data will only be stored in a folder on It's Learning and will only be read by me. When the answers have been analysed and my thesis has been handed in (2015), I will delete all the collected data. The project has been reported to and approved by the Privacy Ombudsman for Research, Norwegian Social Science Data Service.

If you have any questions regarding the study, please contact me on the following e-mail address: <u>benhen@hfk.no</u> or my tutor at University of Bergen, Aud Solbjørg Skulstad (aud.skulstad@if.uib.no).

Thank you for your time,

Benedikte Kj. Hennø

# Appendix III: Questions for the participants (the teachers)

Spørsmål 1		
Please confirm that you have read and understood the information on the front page.		
Besvarelsen din:		
0	Yes	
0	No	
Spørsmål 2		
Please confirm that you are willing to	o take part in the study.	
Besvarelsen din:		
0	Yes	
0	No	
Spørsmål 3		
Are you male or female?		
Besvarelsen din:		
0	Male	
0	Female	
Spørsmål 4		
For how many years have you been teaching upper secondary classes* in English?		
* VG1 General Studies or VG1/VG2 Vocational studies		
Besvarelsen din:		

Spørsmål 5		
What kind of classes do you teach?		
Besvarelsen din:		
	VG1 General Studies (Studieforberedende)	
	VG1/VG2 Vocational Studies (Yrkesfaglig)	
	A combination of the above	
Spørsmål 6		
In the general part of the Knowledge Promotion (Kunnskapsløftet) it is referred to basic skills, which should be promoted in all subjects. What are the basic skills? Please list them.		
Besvarelsen din:		
Spørsmål 7		
How do you understand the term "digital competence"*?		
(*also used: digital skills, digital literacy)		
Please define.		
Besvarelsen din:		

Spørsmål 8		
Do you take the students' digital competence into consideration when planning your English lessons?		
Besvarelsen din:		
C	regularly	
0	sometimes	
0	no	
Spørsmål 9		
Please provide a rough, previously used lessonplan for a 90 minute session, during which the students' digital skills were promoted. * (what - how - why)		
Please state whether this was VG1 or VG2.		
Please include enough information to make it clear what was done.		
Besvarelsen din:		
Spørsmål 10		
Please state why you think this is a useful way to promote digital competence during English lessons.		
Besvarelsen din:		
Spørsmål 11		
Do you have any comments related to the questionnaire or anything else you might have thought about while answering the questions?		
Thank you for your participation.		
Besvarelsen din:		

# Appendix IV: Answers to question 6

"In the general part of the Knowledge Promotion (Kunnskapsløftet) it is referred to basic skills, which should be promoted in all subjects. What are the basic skills? Please list them."

The basics: Read, write, speak, digital competence, mathematics
Reading Writing Computers Speaking Maths
reading, writing, speaking, mathmatical skills and ict skills
Reading Writing Numeracy
Digital literacy
To express oneself in speech To express oneself in writing
To read Mathematical skills Digital skills
reading, writing, talking, ICT, numeracy
reading, writing, working with numbers and computer skills
Listen and speak Write Read
Math skills (numeracy) ICT skills
** Digital competence Reading Writing Listening
reading, writing, listening and speaking
Read Write Mathematics/do calculations Use IT-tools Discuss (not sure about this,
though)
-Reading -Writing - Listening -Oral skills
To be able to express oneself orally, the ability to read and write, the ability to use digital
tools and the ability to read and understand numbers/statistics
Writing skills Reading skills Digital skills Oral skills Math skills
They are both written and oral skills and cultural knowledge and grammar and digital skills.
Reading Writing Speaking Digitcal Competence
Numerical Competence
Speaking writing using number digital skills
Reading, writing, maths, ICT and speaking.
Written skills Spoken skills Maths skills Digital skills
To read, to write, to talk/speak, math and digital skills.
Writing, reading, listening, speaking (and digital) skills.
Reading Writing Calculation Computer skills
Reading, writing, digital competence and basic arithmetic
Reading, writing, speaking, listening, digital skills.
Oral skills Reading skills Writing skills
Numeracy skills Digital skills
everyone must read, count, express oneself orally and in writing, and be able to use digital
means to communicate or work
** Reading writing calculation digital skills
reading, writing, digital skills, calculating
oral, written, mathematics, digital, reading
Language Written communication Culture and society
To be able to:
read
write
speak
ppem

listen and understand		
use ICT		
reading, writing, listening, speaking, ICT and maths		
reading. listening, talking, writing, digital, mathematics		
Speak, read understand.		
Reading Writing Listening/speaking maths IT		
To be able to		
- write		
- speak		
- listen		
- read		
Also, ICT is defined as a basic skill.		
Reading, writing, digital tools, maths and speaking		
read, write, talk, arithmetic, digital competence		
Writing		
reading		
maths		
digital skills		

<sup>\*\*</sup> Original answer in Norwegian. My translation.

#### **Appendix V: Answers to question 7**

"How do you understand the term "digital competence"\*? (\*also used: digital skills, digital literacy) Please define."

"Digital" competence is the opposite of "analogue" :-) just kidding. We shall teach students how to use a computer and different programs in their study. And of course, use the technology ourselves,

Ability to use a computer at school for collecting material, write, make resentations. Organize notes on a PC, recharge batteries, learning platforms, etc

that you are able to use digital tools to aid in your learning and understanding, and know what types of programmes to use for different tasks, know how to use sources correctly

That one is able to use programs include e.g. in the office - like word, excel, oublisher, paint rtc to be able to write and publish texts and media

That one is able to use some sttistical programs and programs like geogebra or indesign - depending on the needs of the specific subject one studies. That one is able to find sources on the internet and to evaluate that critically

that one is able to use learning platforms like Its learning

To be able to use at an adequate level a PC/Mac and the relevant programs on it for learning purposes, communication and for hand-ins and tests, as well as to be able to distinguish between solid and less reliable sources of information.

to be able to use different programs to help you in your studies (all the basic office-program) and to use Internet correctly (find relevant information, give sources, etc.)

To be able to use digital resources in one's process of learning English.

know enough to use the computers to search information, write texts, make presentations, deliver schoolwork

To be able to use a computer (in terms of technical knowledge of different programmes), as well as being critical of which sources to use from the internet, and how things should be published or cited

A person with digital competence is able to use computer skills in a learning process or for other purposes in a useful way

It is to be able to use information technology in a critical way

Skills regarding which sources are reliabld when writing, "netiquette", cooperation over the Internet, the use of spesific tools/software.

I understand the term "digital competence" as how English teachers are able to integrate the use of digital information as the Internet, Wikipedia, google etc. in their English teaching.

I also understand the term as how well the students are able to use their computers to expand their English....(computer knowledge)

Ability to use digital tools in the language learning, searching for information, using digital dictionaries, taking advantage of opportunities given by working with text on pc, making digital presentations, selecting appropriate sources from online, etc.

that student should be able to find their way on the Internet, be critical to the information they find, behave according to net ethics and also be able to produce texts in the widest sense.

Digital compentence, in my mind, means that you are able to use digital tools sufficiently in you work\education. It also means that you have an understanding of the limitations that exist in the digital word. I.e bad sources.

For students it more specifically means that they are able to use learning software and writing

tools (Office, iFinger), and that they can use the internet to aquire credible information.

That the students should be able to master digital programmes like power point, photostory etc. Also, they should be able to search for information on the internet with a "critical eye". Additionally, they should be able to use it's learning in the learning process at school as well as home.

To be able to use a computer or a tablet. To be able to use the internet to do research and to use software installed on the computer.

Being able to use the computer and the internet as a tool, both in school and in their sparetime.

The ability to make use of the different gadgets surrounding us. To master common browsers and programs.

Being able to use a lap top and/ or other devices in order to write texts, find information, do research, keeping in touch with fellow pupils and teachers etc.

The ability to use digital programs and applications on various technological devices for daily and professional use.

Be able to use digital remedys in a good way.

Be able to be critical to information you find.

Be able to be critical to where you find information.

Be able to save and use information you find or things you have made.

it means that one can use computer and internet for both professional and private usage. It can mean that people are able to find information on the net, use computer programmes for work and private/entertainment purposes...

Being able to use a computer for different purposes connected to the subject.

Understanding digital media (internet, film, commercials, social media).

Critical use of digital media.

be able to use a computer: use Word, Excel?, learning platforms, the internet

To know how to use the computer as a tool, to make Powerpoint, as a notebook, and to use sources in a proper way

Kowledge in how to use digital tools to enhance learning, for example how to use the internet to research a topic or how to use a computer to write a paper.

To be able to use any digital device to research any topic relevant to the English curriculum and to produce a well-structured text or presentation with proper reference to sources.

Being able to use computer software (e.g. word processing and have a system for storing), the Internet, presentation tools (both software and technical equipment such as projectors etc

The students should be able to find and use information from the internet. Know how to use the computer in different ways, and be able to use the right sources etc..

ability to use Internet sources/paraphrasing

search engines

powerpoints/photostory/word/excel

How to systematize documents

Clouds

Be able to look up information on the net, use the smartboard to watch a film or give info. to produce power point, text, tasks etc on your computer

To be able to use digital tools, i.e. hardware and software, in a learning environment. This

#### entails skills like:

- knowing how to use Word, Powerpoint and a variety of other software in an effective way to produce various work
- knowing the computer (what buttons to click and whatnot) and how to use it for presentations, making audio and video files
- knowing how to search the Internet effectively for relevant information
- having an awareness of the quality of information on the Internet
- being able to use social media in a classroom setting, e.g. for communication, discussions etc.
- having an awareness of how oneself interacts with various digital tools and its consequences. The ability to use computers proficiently. This includes general computer skills, and different types of software (for example Office, iFinger). It also includes the use of internet. By this I mean how to find and use information from the internet.

be able to write and upload a document, find and read information on the internet, make folders, be able to use the mail and message devices, make presentations with links and pictures, take prints, download and save programmes

set of tools neeed to function in a digital world

Two participants did not answer this question.

## Appendix VI: Netiquette for teachers in Hordaland

Kunne be om nytt eller byte
passord for pålogging i HFKnettet
Reglar for personvern (bilete på
nett og bruk av sosiale medium
Reglar for opphavsrett (tekst og
bilete)
Kjeldekritikk og korrekt
kjeldebruk
Handtere plagiering og fusk i HFK

og til eksamen

Kjeldekritisk bruk av søkjemotorar (Google eller andre)

Tryggleik ved bruk av skytenester

Screenshot of the netiquette checklist in the county's survey.

Source: www.laringihordaland.no

### **Appendix VII:** Platforms, software and sites mentioned in the lesson-plans

Below there will be given a short description of the specific platforms, sites and programs that were mentioned by the participants:

- NDLA, National Digital Learning Arena, is a platform provided by the authorities
- Microsoft Office is a collection of software developed by Microsoft and is provided
  by the county to all its students and teachers for free. Word is the text editing program
  and is the preferred software when teachers are to use DirectEdit via itslearning when
  correcting and commenting on students' written texts in writing.
- *Skolearena* is learning platform where absence, grades and other evaluations are recorded and stored
- Itsl or itslearning is the LMS used in Hordaland County
- PowerPoint and Prezi are presentation tools. Power Point is clearly the one most often mentioned which might indicate that this is the program preferred by the teachers. While one by using PowerPoint produce slides with various types of content (text, pictures, soundtracks, film clips, etc.), Prezi lets the students work on a large canvas on which one can pan and zoom to parts of it to emphasize the ideas presented there. They can also include text, images, and videos etc. in a Prezi presentation.
- Screencast-O-Matic is software that allows you to film the computer screen as well as sound. It available in two versions: a free one with up to 15 minutes recording time, but limited editing possibilities, and one you have to buy which provides you with more time and better editing options.
- Moviemaker is freely available software which can be used to create and edit videos
  without modifying the original file on your hard drive, which means that you can
  create a nearly endless number of movies based on the same footage.
- iMovie is part of Apple's software package for Mac and is used for editing video with the opportunity to add effects, music, sound, etc. fairly easily. The finished film can be sent via email, uploaded to YouTube, etc.
- Photo Story is a free application from Microsoft. The users can create a visual
  presentation based on digital photos to which narration, pan and zoom effects, and
  background music can be added.
- iFinger is a digital, multilingual dictionary, which, at the time of the survey, was provided to students and teachers for free by the county. The dictionary can be used both online and offline which means that this was the only digital dictionary the

- students would be able to use (for free) on tests, mock exams and exams when their net access would be blocked. (Currently OrdnettPluss is the online dictionary provided for free by the county. It has similar functions).
- Quizlet is free software which can be used to make sets of tasks to help students develop their vocabulary. Both pictures and sound may be added. The students can select language, audio and motion as well as their "study mood" themselves (i.e. learn, flashcards, scatter, test, speller or space-race). Several options include game elements such as score, "lives" which can be earned, time spent, etc. which makes it possible for students to try to beat each other (or the teacher) in a competition.
- Facebook and Twitter are both well-known social media.
- CNN and BBC are news broadcasters with videos and films, written articles, radio broadcasts, live chats, etc.
- Wikipedia is a free, online encyclopaedia where anybody can become the author and editor. Its content is the result of a collaborative effort: Anyone registered on the site can create an article and everyone can edit them.
- SMARTboard is software necessary to fully take advantage of the possibilities of the interactive whiteboards that can be found in many classrooms in the county today.

### Appendix VIII: Preapproved websites for use during exams in Hordaland County

- lexin.udir.no: a bilingual dictionary, Norwegian and various foreign languages, not including English
- www.ordnett.no: various bilingual dictionaries, including Norwegian-English, the replacement for iFinger
- www.nob-ordbok.uio.no: Norwegian dictionary, two types of Norwegian
- www.snl.no: Norwegian encyclopaedia
- www.allkunne.no: Norwegian encyclopaedia
- www.lovdata.no: official website for Norwegian laws
- www.fn.no: official Norwegian website for the United Nations

# Appendix IX: Answers to questions 6, 7, 8, 9, 10 and 11

The 34 sets of answers discussed in section 4.8.

### Teacher 1

6	The basics: Read, write, speak, digital competence,mathematics
7	"Digital" competence is the opposite of "analogue" :-) just kidding. We shall teach students how to use a computer and different programs in their study. And of
	course, use the technology ourselves,
8	regularly
9	We read texts, or watch a film, we work on the content and the vocabulary in different ways, translating keywords, answer questions, doing tasks, usuallu written first and then spoken. We read text in our textbook or find texts on NDLA. Written tasks are handed in on ITSL. For spoken task I have used Screencast-O-Matic
10	Sometimes it is usefull, you can easily share stuff, you can use digital dictionaries (i-finger)and you find a lot of videos and all kinds of information, in English.  Sometimes it is just disturbance, the students are on Facebook instead of working on their tasks etc.
11	No comments :-)

6	Speaking writing using number digital skills
7	that student should be able to find their way on the Internet, be critical to the information they find, behave according to net ethics and also be able to produce texts in the widest sense.
8	Regularly
9	(no answer)
10	We normally use computer in every class. We look at news clips from the BBC or the CNN or other sources and discuss current affairs.
	The student are asked to find information on a certain topic and present it to the class, mostly as a powerpoint.
	They can be asked spontaniously to find facts e. g. Who is Graham Greene?
	They may have project works over a longer period and find relevant material from different sources. They are required to have references in the text and to list literature used and sometimes assess the quality of their sources.
	These are skills they need to develop over time.
11	The training of digital compentence is not done sperately but integrated in the work we do on the subjects.

# Teacher 3

6	They are both written and oral skills and cultural knowledge and grammar and digital skills.
7	I understand the term "digital competence" as how English teachers are able to integrate the use of digital information as the Internet, Wikipedia, google etc. in their English teaching.
	I also understand the term as how well the students are able to use their computers to expand their English(computer knowledge)
8	Regularly
9	Session: Text understanding
	1. I always try to integrate the basic skills in my English teaching, so when the session is text understanding I ask my students to read the text loud in class(oral skills).
	Usually two or three or nearly all the student do some reading - then I try to ask the students about the text (discussion).
	2. The class must answer questions and grammar on itsl which I have prepared before class (digital competence and writing skills). This makes it possible to me to see how the student writes, workes etc.
	3. We might use the Internet (you tube) to watch something relevant to the topic (text) - add questions on itsl
10	Because the studens use digital information and their digital skills during the English lesson(also we listen to the text after reading!)
11	No comments

6	reading, writing, digital skills, calculating
7	be able to use a computer: use Word, Excel?, learning platforms, the internet
8	Regularly
9	VG2: Hairdressers
	- did "tools task" on NDLA
	- practised hairdressing terminology by using quizlet
	- pair work on a website with different hairstyles (names and descriptions)
	- written descriptions in Word of two chosen hairstyles from 2015 winter fashion (given website)-> handed in on it's learning
10	The textbook we use does not have this type of material for hairdressers and will of course never be able to provide up to date information on topics like fashion. In addition, handing in texts on it's learning is much more practical in every way.
11	Not really <sup>©</sup>

# Teacher 5

6	Listen and speak Write Read
	Math skills (numeracy) ICT skills
7	To be able to use digital resources in one's process of learning English.
8	Sometimes
9	What: Goals for the lesson were to discuss news and learn about the gun issue (US).
	How: - Each pupil had to scan digital newspapers for relevant news items and summarize to each other. Afterwards, the various news items were commented and discuss in class.
	- Gun issue: The class read an introduction in their reader (Tracks 2013) and worked online with various tasks. The first task was to listen to a dialogue between two individuals discussing the gun question and its pros and cons. Other tasks required the pupils to show how well they had understood the dialogue Gun issue continued: The students read a text in Tracks: "Black and White" and did tasks. No digital skille were promoted here.
	Why: Competence aims connected to news and culture.
10	The news: Pupils get to navigate digital newspapers written in good English (e.g. <a href="www.bbc.co.uk">www.bbc.co.uk</a> ) and will also be made aware of various critical aspects (quite often the pupils will wonder at the difference in coverage a given news item receives in English and Norwegian media).
	The Gun Question: Individual listening enables the pupils to work in their own pace.
	*not quite sure if I understood your question
11	See my answer in question 10. Digital tools are helpful for optimizing teaching and creating varied circumstances in which pupils may learn English best. However, "digital skills" is just one of five basic skills, and I strongly believe that one should always use digital tools critically in the classroom (given how pupils might use the PC for other things than English learning).

6	Writing, reading, listening, speaking (and digital) skills.
7	Being able to use the computer and the internet as a tool, both in school and in their sparetime.
8	Regularly
9	VG1: We were working with Northern Ireland!
	1. Read the overview in the textbook, had them take notes.
	2. Read the factbox on tracks.no, had them take notes of why there are troubles in Northern Ireland.
	3. Put four (I think, I dont have them in front of me atm) questions on the black board, and told them to find answers to these questions by searching on the web

page bbc.co.uk. For example find out what the IRA is, and what Sinn Féin is.

Why I didnt provide proper links or titles of what articles to look for is because I wanted them to explore this particular website. I find it quite useful myself. I figured if I only gave them the subject of what to investigate and what page to go about to find answers, they would have to get to know the page in a different way.

We cant give the students information of what to do and what not to do, they have to experience it themselves. Explore various sites, find information, aso.

I think students nowadays have great knowledge about computers, but I also think a lot of them lack the ability to use it properly as a tool in school. They are not aware of where they get their information from, and they use sites like wikipedia without hesitating.

### **Teacher 7**

6	Writing skills Reading skills Digital skills Oral skills Math skills
7	Skills regarding which sources are reliabld when writing, "netiquette", cooperation over the Internet, the use of spesific tools/software.
8	Sometimes
9	VG2 What: Write a job application and CV How: First use TracksPRO (digital software solution additional to the regular
	textbook) to learn the structure of an application letter and a CV. Then write your own job application and CV in a word document, and hand in.
10	I am not too familiar with using digital tools myself, so I'm not sure if this will help enhancing digital competence in English. (Not sure of I understood the question right - my answer to this question is in relation to the previous one)
11	No.

6	reading, writing, listening and speaking
7	know enough to use the computers to search information, write texts, make
	presentations, deliver schoolwork
8	Regularly
9	VG2 I was not present in class because of an important meeting. In this case the
	whole session was realized digitally.
	Analyzing short stories
	Three short stories were presentend on the class page on it's learning. The students could choose one of them.
	On the same page they could also find examles of how to analyze a short story ( in Norwegian and English)

	They used Word for writing and delivered their texts on it's learning. When I came back I could explain more exactly and give them advice about this kind of exercises.
10	You can get in contact with the students from any distance
	If they have cuestion when I am absent, we can reach each other. In class they can easily write texts in Word, and as we are working a lot with projects, they need to search information on the web.
	But: It is important to shut down the computer when it is not needed, for intance when I teach grammar or other impotant information, or when they are discussing themes og reading. The scool's rules are very strict in this cases.
11	(no answer)

# **Teacher 9**

6	Reading Writing Computers Speaking Maths
7	Ability to use a computer at school for collecting material, write, make presentations. Organize notes on a PC, recharge batteries, learning platforms, etc
8	Regularly
9	VG1 Use your computer to plan a journey to a one/several destinations in the USA. Your budget is 30. 000 kr.Make a powerpoint presentation to show the places you visit, budget and how you spent your money.
10	1) Real life situation. 2) Motivation. Everyone likes to travel, and PC is often used in real life to look for attractions and tickets. 3) Making a powerpoint presentation is an important skill today, later in life they will find it handy to have the experience, 4) English texts and language is used on the Net everywhere
11	(no answer)

6	everyone must read, count, express oneself orally and in writing, and be able to use digital means to communicate or work
7	it means that one can use computer and internet for both professional and private usage. It can mean that people are able to find information on the net, use computer programmes for work and private/entertainment purposes
8	Regularly
9	Todays classes with VG2 students: overall topic is "The UK". We spoke and read
•	texts about the UK and London. The last task was to plan a 3-4 days tour to London. Using intenet websites students working in gsmall groups were supposed to find cheapest transport to London, accommodation there, transportation in London, plan the sightseeing and shopping, eating. They should create a budged of the trip and prepare a short presentation of their plan.
	Students make use of English (speaking, discussing, reading, writing and counting). They find the relevant websites (airlines, underground, prices, evaluation of hotels

	and restaurants, money-converter,) Students learn /practise navigating them and learn to evaluate them.
10	I cannot imagine future life without digital means of any kind so they must learn to use it, not only to play games. I hope using internet and laptops also help them to be more motivated to learn English
11	(not answered)

6	reading. listening, talking, writing, digital, mathematics
7	The students should be able to find and use information from the internet. Know how to use the computer in different ways, and be able to use the right sources etc
8	Sometimes
9	Vg2 The state of the World: Find information about a voulntary organization: Where, how, when they work, how many people are members etc. Make a presentation and present in class.
10	The students learn how to find reliable sources and search for specific information.
11	You are welcome. Good Luck!!

6	reading, writing, listening, speaking, ICT and maths
7	Being able to use computer software (e.g. word processing and have a system for storing), the Internet, presentation tools (both software and technical equipment such as projectors etc.)
8	Sometimes
9	VG2 Health and Social Studies: Presentation of work placement in a nursery school or SFO
	Preliminary work involves reading texts about working with children, children at play, being a role model etc. to provide vocabulary.
	The task is to give a 5 minute presentation where the students include information about the following:
	- the institution and unit where they work
	- the routines of a normal day/week
	- the work they do
	- what learning target they have chosen and how they work with it in practise
	- evaluation of work place and their own work
	In the 90 minute lesson the students have to find information about and pictures from the institution on the Internet (obviously they know a lot from having been

there). They also have to search the Internet to find pictures that can illustrate the rest of the presentation.

Most students are familiar with Power Point and Moviemaker, but unless they protest too much, we have a short session where we go through the basics, mainly on Moviemaker, but a few times we have looked at Prezi. The students may choose what kind of presentation tool they want to use. The most shy often prefer to use Moviemaker. Then it is up to them to ask for help.

The presentations are given the following week and the use of ICT is one of the criteria for evaluation.

The students have a twofold task in finding something they need on the Internet. First, a very specific task that requires them to go to a specific website. Not difficult, but in addition they have to translate the information into English. Then most students will use online translation tools and they will find that it takes more brainwork to translate the words and phrases than hitting the right key. Second, there is a fairly specific task in finding illustrating pictures. This may take them to all sorts of websites. Then they have to practise finding the most useful search words in English, a skill that will always be useful.

The presentation also requires that the students become more familiar with different tools that can be used. There are still students who are not familiar with Power Point. They are guided and helped. Those who are familiar with PP are at different levels and some are encouraged to try something new, e.g. Prezi, Moviemaker, Photostory, iMovie etc. Those who find it to stressful to give a presentation in English sometimes find Moviemaker and Photostory very useful.

If forgot to say that evaluating digital sources is an important part of digital competence. Students are therefore asked to state their sources and, in presentations, to comment on them. However, getting them to actually do it is an ongoing project.

6	-Reading -Writing - Listening -Oral skills
7	A person with digital competence is able to use computer skills in a learning process or for other purposes in a useful way
8	Regularly
9	Plan: Prepare a visual presentation about a topic of your own choice:
	1. Find information about your topic on the Internet and organize the information you are going to use (Remember to write down the sources)
	2Write a script
	3. Prepare the visual part of your presentation
10	During this lesson the students were trained to
	-find information
	-select information

	- prepare a visual part
11	No

6	Language
	Written communication
	Culture and society
7	Kowledge in how to use digital tools to enhance learning, for example how to use the internet to research a topic or how to use a computer to write a paper.
8	Sometimes
9	The students made an oral presentation.
	They were given a topic that they had to research. The topics were current events so it
	was natural to use the internet for research.
	They then had to make a presentation and were encouraged to use power point or
	similiar.
	This was for VG2.
10	This task covered both the practise of using digital tools for research, and how to use it for communication. Both is highly relevant in work situations and for further studies.
11	(No answer)

6	read, write, talk, arithmetic, digital competence
7	be able to write and upload a document, find and read information on the internet, make folders, be able to use the mail and message devices, make presentations with links and pictures, take prints, download and save programmes
8	Regularly
9	Topic: Global English (history)
	1.Vocabulary task (central words they have to learn): use of online dictionary
	2. Find and study a map (given link) on the topic
	3. Read a couple of factual texts on it's learning and on NDLA
	4. Take a quiz (from the factual texts)
	5. Make a presentation based on information gained (pictures, links, sources)
10	This task gives the students the opportunity to practise several aspects of their digital competence

11 to question no 9: I forgot to mention that the students must hand in their powerpoints on it's learning before the presentation

## **Teacher 16**

6	Reading Writing Speaking Digitcal Competence
	Numerical Competence
7	Ability to use digital tools in the language learning, searching for information, using digital dictionaries, taking advantage of opportunities given by working with text on pc, making digital presentations, selecting appropriate sources from online, etc.
8	Sometimes
9	- Search for information about a given topic relating to British history/culture/politics
	- Select information to include in a 3-5min presentation
	- Create a digital presentation (allowed to use power point, prezi or suggest others, but all students used power point because they are familiar with it)
	- Comment on the sources used
	VG1. The students were given 90min + homework, gave their presentations the following session.
10	Because the digital competence aim becomes quite clear, they get a chance to practice finding and reading different sources and have to be selective due to the short time span and they get to practice making a presentation which they are likely to need to be able to do in further studies/work and on an oral exam.
11	Only that it made me think about whether my understanding of "Digital competence" is a "correct" understanding and wonder how others work with this actively in less obvious ways than my examples.

6	Speak, read understand.
7	Be able to look up information on the net, use the smartboard to watch a film or give info. to produce power point, text, tasks etc on your computer.
8	No
9	Australia: Read a novel in their book, find information about Australia on the net.  Make a power point presentation to perform in class. Hopefully they will learn more about Australia, which is part of the curriculum, by actively finding info by themselves.
10	It is a good alternative to their English book and they are "learning by doing"
11	(not answered)

6	To express oneself in speech To express oneself in writing
	To read Mathematical skills Digital skills
7	To be able to use at an adequate level a PC/Mac and the relevant programs on it for learning purposes, communication and for hand-ins and tests, as well as to be able to distinguish between solid and less reliable sources of information.
8	Regularly
9	Vg1 English for general studies, a study we are doing right now based on Internet sources:
	Time frame: 4 sessions of 90 minutes, 1 90-minute session for practise and 1-2 sessions for giving the lectures and getting feedback on them.
	What/Context: Project work concerning African American history and current states of affairs for that group in pairs, to be handed in as an 8-minute lecture without a manuscript, but with a visual presentation over a projector to the class.
	How: After having had a narrow topic and approach to the topic approved by the teacher, each pair searches for good sources of information, collects information/graphs/images etc. and links for the sources. In order to avoid the pitfall of creating a purely reproductive lecture, the approach must direct them towards discussion/evaluation/reflections upon what they discover. They must speak English while they work.
	Why: To get some really concrete insights into African American history and current affairs, to make theory come more alive to them, and to let them develop their various skills in English and in e.g. reading and understanding charts/diagrams, and in learning to use and practising the use of digital sources and programs. (Otherwise they have only a 7 year old textbook at their disposal and the knowledge I am able to give them)
10	It lets my students learn and practise many aspects of "digital competence" at once.
11	(no answer)

6	To be able to – write – speak - listen – read Also, ICT is defined as a basic skill.
7	To be able to use digital tools, i.e. hardware and software, in a learning environment. This entails skills like:
	- knowing how to use Word, Powerpoint and a variety of other software in an effective way to produce various work
	- knowing the computer (what buttons to click and whatnot) and how to use it for presentations, making audio and video files
	- knowing how to search the Internet effectively for relevant information
	- having an awareness of the quality of information on the Internet
	- being able to use social media in a classroom setting, e.g. for communication, discussions etc.

- having an awareness of how oneself interacts with various digital tools and its consequences
- 8 Sometimes
- 9 what: A project about English as a global language. Timespan: 2 weeks + time for presentation. Individual work.

VG1, early in the school year (after the first written test).

A rough sketch of the lesson plan:

Lesson 1: Instructions were given and the students were shown how to cite sources.

Lesson 2-6: The students worked on their own with the three questions and were shown, upon request, how to make a presentation using Powerpoint of Prezi.

Lessons 7x: Individual presentations, immediately followed by feedback from peers and self-assessment. Finally, feedback and grade were given by teacher.

how:

The students were asked to use it's learning as a starting point for the project. In a folder on it's learning they had to navigate between the following questions (all of which were categorized as sub-folders):

- Explain the terms: Mother tongue, Second Language, Foreign Language, Lingua Franca?
- Why is English a global language?
- What is the current status of English as a global language?

Within each folder there were a variety of digital and non-digital sources the students had to work with. The students had to use these sources in order to answer the questions. They should also use other sources from the Internet.

why:

The foremost aim of the project was for the students to learn about English as a global language.

Other aims were

- the student should become familiar with it's learning and Powerpint or Prezi (www.prezi.com)
- the student should learn how to cite sources
- the student should use digitial and non-digital sources to answer the questions

This project did not emphasize critical awareness as such, although individual students were given advice when difficulties and problems arose.

- Because the students had to use it's learning and the digital sources provided there in order to learn about English as a global language. Furthermore, they had to use digital tools on order to show their competence and for self-assessment.
- ICT can be useful in learning environments, but students should not be allowed to use their private PC/Mac in class as this so easily enables them to get lost in non-relevant activities (Facebook, Skype, Twitter etc.). Why not re-introduce computer labs or placing 15 PCs in every classroom, all of which shold be specially constructed for learning purposes (i.e. not possible to access social media etc)?

6	Oral skills
	Reading skills
	Writing skills
	Numeracy skills
	Digital skills
7	Be able to use digital remedys in a good way.
	Be able to be critical to information you find.
	Be able to be critical to where you find information.
	Be able to save and use information you find or things you have made.
8	Sometimes
9	VG2
	At the end of an era where the focus have been indigious peoples of English speaking countries
	What: make a digital story of an indigious peolpe from an English speaking country
	How: use information you have found and present it by using screencast-o-matic (pictures/movies and your own woice): where they live/lived, how they lived, how the state have treated them, how they are treated by ste state, and live, today
	Why: be able to find and use information, get knowledge about one (or more) indigious peoples, use a digital remedy to make a story
10	It is a way to make them use a digital remedy the probably woud not have known about if I had not shown them. It is a way of making them awer of the responsibility of being critical of the information they find. It is also a way for them to present, not for the class, but for me alone (without it takeing several lessons where the other pupils think of it as a "lesson off").
11	(not answered)

6	Writing
	reading
	maths
	digital skills
7	set of tools need to function in a digital world
8	Regularly
9	Photostory
	Pupils asked to find a subject of preference and asked to make a photostory/imovie presentation.
	asked to find information in differenct sites at internet, and asked to be creative in

	choice of pictures
	include list of sources
10	because they need to be creative and critical about the sources they find appropriate. Find new info.
	This is a way to use DC in schoolwork
11	forgot to mention that the project I escribed was at VG2
	In general, the C pupils have is very narrow.

6	reading, writing, working with numbers and computer skills
7	to be able to use different programs to help you in your studies (all the basic office-program) and to use Internet correctly (find relevant information, give sources, etc.)
8	Sometimes
9	What: In groups of 3, hold a short oral presentation about the English language in a given country, use ppt. (Varieties of English)
	How: Find information online that answer the following questions; Why is English an official language in this country (history)? What characterizes the English used in this country? pronunciation, vocabulary, spelling etc. give examples! (Try to find a soundtrack were we can hear the accent) What is the attitude towards the English language in the country, is there other official languages in this country? Write down your sources, comment on credibility, use a power point when presenting.
	Why: Be able to recongnize varieties of English, understand how English spread and became a global language, practice searcing on the web, and learn to question your sources. Practice making a well structured and informative ppt. Practice your presentation skills and oral English.
10	the students get to practice how they can use the Internet to help them find information, to be critical of what they find and reflect on their use of sources
11	(no answer)

6	To read, to write, to talk/speak, math and digital skills.
7	To be able to use a computer or a tablet. To be able to use the internet to do research and to use software installed on the computer.
8	Sometimes
9	This was a lesson for VG2 vocational studies.
	What - Job interviews
	How - We started talking about how you would go about finding a job. What would you do? What would you NOT do? Then we looked at examples of job adverts in the book
	(Tracks). The students were then asked to pick one that they found interesting, go online

to the "Tracks" website and read the full advertisement. Their task was then to use information both in the book and on the website to write a script for a job interview, then use software that they downloaded to their computers to record the interview. (This was originally a 55 minute lesson with homework, but can in theory be a 90 minute lesson.)

Why - The students need to be able to use English to express themselves orally and in writing. This lesson allowed them to be speak about their vocation as well as experiencing what it would be like to go on a job interview. They were also able to use their digital skills to go online and to download and use recording software.

Students need to use their computers daily in order to find information and communicate with others. Finding job adverts online is also something they might need to do later in life.

#### **Teacher 24**

6	Reading Writing Listening/speaking
	maths
	IT
7	ability to use Internet sources/paraphrasing
	search engines
	powerpoints/photostory/word/excel
	How to systematize documents
	Clouds
8	Regularly
9	Teacher hands out 20 questions on a sheet of paper to each student. They are asked to put away computers and use a pen to make notes/find answers to the questions while listening to a powepoint presentation by teacher.
	Teacher holds a 45 minutes long presentation where she presents a comparison between Canada and the USA. Studens find answers to their questions.
	After a short break, the students have to read one of the questions and provide answers, in class, one by one.
	Listening to a powerpoint presentation without being distracted by your own computer is also a didital skill.
10	Learning when NOT to use your own computer, put a limit to its use is also an important skill.
11	One example is not enough

6 Reading
-----------

	Writing
	Calculation
	Computer skills
7	The ability to make use of the different gadgets surrounding us. To master common browsers and programs.
8	Regularly
9	VG2
	What: vocational English, tools in the workshop  How: Everything is done during a double lesson: The students use their phones to take photos of different equipment in their workshop. Back in the classroom they upload them into their computers and to PowerPoint, put the correct names on the tools in both Norwegian and English, and finally upload it to itslearning. It's a competition: Who can make most? Why: It's a competition, and therefore the students hurry and ask for help to master the digital skills needed. Most importantly, they learn the vocational vocabulary and we can use the photos afterwards.
10	See last question.
11	It was demanding, and therefore some people felt reluctant to participate.

6	Read Write Mathematics/do calculations Use IT-tools Discuss (not sure about this, though)
7	To be able to use a computer (in terms of technical knowledge of different programmes), as well as being critical of which sources to use from the internet, and how things should be published or cited.
8	Regularly
9	WHAT: Write a text on a topic + Learn how to cite sources
	HOW: Read an example text with quotes from different types of web sites, as well as direct and indirect quotes. (The different types being coloured differently to enhance the differences.) The text is shown on the SmartBoard, and we read + study the text together. Watch animation on the subject on ndla.no. Discuss chosen tasks in the animation.
	The sample text is shown again, and the different quotes explained again. The students are given a task to write a similar text on a given topic using given web cites. Two and two write together. Some will manage to write several paragraphs, other only one.
	Short info about formal texts (no contractions).
	WHY: To learn about how to cite works. Write a text with formal language. Learn words/phrases from a fellow student
	Working in pairs may be more motivating.
	Students will have to talk, write AND use digital skills.

10	Learning the formal set up of citing works will be useful for the following exam, as well
	as for further studies. The students write the text on a computer, hence develop their
	technical skills. The students may learn from each other, and it might be less "scary" to
	write together.
	(This lesson was for the 2nd year yrkesfag and 1 studieforberedene- not sure if I stated that on the previous page)
11	No questions

6	Lesing
	skriving
	regning
	digitale ferdigheter
7	Being able to use a computer for different purposes connected to the subject.
	Understanding digital media (internet, film, commercials, social media).
	Critical use of digital media.
8	Sometimes
9	What: Students write and hand in an accident report in English
	How: The report is handed in via a test in it's learning. The students fill in their personal information and other information about the incident in an online form.
	Why: I used the form/test at it's learning to make the situation more authentic and more motivating for the students (because they think it's more fun to fill in information at the internet than to write it in a Word document). In addition, by using the test I guide the students through all the elements that are required in the report. Thus I make sure they don't forget any parts of the report.
10	I don't really see it as a way of promoting digital competence, more like using digital
10	tools to make the lessons better.
11	Thank you and good luck!

6	To be able to express oneself orally, the ability to read and write, the ability to use
	digital tools and the ability to read and understand numbers/statistics
7	It is to be able to use information technology in a critical way
8	Regularly
9	1. Search on the Internet and find two articles which have to do with the gap between rich and poor
	2. make sure you find reliable sources and explain why you think the sources are reliable

- 3. Comment on the articles, do they present the same view, is the language formal/informal and do you agree with one of them more than the other?
- 4. Find a web site about poverty in the world today and explain what it tells you about poverty, does it give any reasons for why this exact part of the world is poor and does it give any suggestions to how things might get better? Why do you trust this web site?

This is meant for VG1

- I think it is important that students get used to using digital tools in every subject, because this will be valuable when applying for a job. You should be trained in doing all kind of tasks on the computers, the laptops or whatever digital tool you use.
- 11 No, good luck!

#### **Teacher 29**

6	Reading, writing, digital tools, maths and speaking
7	The ability to use computers proficiently. This includes general computer skills, and different types of software (for example Office, iFinger). It also includes the use of internet. By this I mean how to find and use information from the internet.
8	Sometimes
9	VG2
	What: Make a presentation of an ongoing conflict\war. It should last approx. 10 minutes, and give the audience a basic understanding of the conflict.
	How: Use sources from the internet to gather the neccessary (sp?) information to answer a list of questions provided by the teacher. This should be presented by using a powerpoint presentation.
	Why: The lesson mainly covers a curriculum requirement about current affairs\conflicts in the English-speaking world. a secondary goal was to make it clear to the students that not all information on the internet is credible. This is especially important when searching for information about current and controversial subjects. The last and least important (or focused upon) goal was to talk about what makes a good powerpoint presentation.
10	It shows very clearly that not all sources can be trusted. Using the "War on Terror" as an example, you can se quite a lot of conflicting information. This teaches the students to be more critical when using digital aids.
11	(no answer)

6	Reading, writing, speaking, listening, digital skills.
7	The ability to use digital programs and applications on various technological devices for daily and professional use.
8	Sometimes
9	At vg1 YF, I always teach one of the initial classes on digital competency, so that I
	know that they will be able to use word, it's learning, skolearena etc. This includes

	showing them how basic functions of word works, how to access It's learning, and how to make a folder structure in which to save documents. They get tasks such as to make folders, to save word documents, upload them to It's Learning, to chech their absences
	on skolearena, and so on.
10	It is important for them to learn the basic functions of ordinary programs. They often
	only have competency in entertainment aspects of the digital world, but if they do not
	know how to use ordinary, useful programs, they will have problems in their work life.
11	No.

6	Written skills Spoken skills Maths skills Digital skills
7	That the students should be able to master digital programmes like power point, photostory etc. Also, they should be able to search for information on the internet with a
	"critical eye". Additionally, they should be able to use it's learning in the learning
	process at school as well as home.
8	Regularly
9	Vg2 students: They downloaded photostory and "played" with the programme by
	making a random story in English while learning how to use it. This took about 90
	minutes and was a prelearning strategy for a vocational project where they used
	photostory.
10	They use the computer during the whole session and the programme has many elements
	that can be used in other digital programmes as well.
11	I am not sure whether you prefer the answers in English or Norwegian, howeve, since
	you asked them in English I prsumed you preferd English answers:)

6	reading, writing, speaking, mathmatical skills and ict skills
7	that you are able to use digital tools to aid in your learning and understanding, and know
	what types of programmes to use for different tasks, know how to use sources correctly
8	Sometimes
9	use of digital dictionary: Start with a presentation by the teacher of the dictionary, we use iFinger
	after this presentation the students were given different tasks for them to get to know how to use the dictionary. They worked on their own with the teacher walking around helping those who needed it. towards the end of class we went through the tasks to check that everyone had found the right answer and then discussed what thy thought of the dictionary and how it worked.
10	because the students need to know how to use it and they will benefit from this later on in the year. I usually do this early in the year for the students to get the most out of the dictionary.
11	good luck!

6	Reading, writing, maths, ICT and speaking.
7	Digital compentence, in my mind, means that you are able to use digital tools sufficiently in you work\education. It also means that you have an understanding of the limitations that exist in the digital word. I.e bad sources.
	For students it more specifically means that they are able to use learning software and writing tools (Office, iFinger), and that they can use the internet to aquire credible information.
8	Sometimes
9	I don't have any lessonplans in my vicinity at the moment, so this will indeed be a rough draft.
	Vocabulary learning\iFinger translation.
	What: Read a new text, with a reasonable amount of unfamiliar words.
	How: The student read the text, either in pairs, in a group or by themselves. When they are finished, they start writing down, or mark the words they don't understand. After that, they use the dictionary software iFinger, to translate the words into Norwegian.
	Why: This both increases their vocabulary, provides the students with new knowledge, and lastly improves their ability to use the dictionary independently.
10	I believe this is useful because, hopefully, the students can see the purpose of the activity. The students need to be able to use the software when writing exams. As an added bonus it could also show some students why Google Translate is a wolf in sheep's clothing.
11	Nope.

6	Reading Writing Numeracy
	Digital literacy
7	That one is able to use programs include e.g. in the office - like word, excel, oublisher, paint rtc to be able to write and publish texts and media
	Tha one is able to use some sttistical programs and programs like geogebra or indesign - depending on the needs of the specific subject one studies. That one is able to find sources on the internet and to evaluate that critically
	that one is able to use learning platforms like Its learning
8	Regularly
9	At the moment we have 60 minutes lessons i.e. 120 minutes for a double lesson, but I plan here for 90 minutes Vg1 plan - work with art - after a general introduction about art. (10 minutes)
	1. Go to specified website of a museum (students are given some suggestions) - individual work - the use of the internet. Find a work of art which appeals to you - find information about the painter and about this particular painting (20 minutes) - the use of

- the internet 2. Work now in groups of four and exchange your paintings and information about them (15 minutes) oral skills 3. Further work in groups make a PPT presentation of the pieces of art you have chosen include information about the painter, the period, characteristics of the painting and details of what it presents. the use of information found, and the use of PPT 20 minutes 4.Practie tour presentation check pronunciation ofe words and names in the online dictionary. 5. Homework write a compositve text summing up your experiences with working with art.
- Modern world requires the use of computers, social media etc. both in private life and in working life, and especially when you study further at the university. English is the most used language on the internett and in many walks of life. I would say that this question needs no longer tol be answered it is obvious thata one has to do it. However, one should not forget that digital competence is not everything it is a tool, which maya be applied while learning comptence aims in the subjects. It is important that "form" produced with digital means does not take over the content...
- I was wondering what you actually want to investigate the questionnaire seems to be rather trivial.. You do not ask about anything essential and concrete... And if you want to look into the actual work with digital literacy then qualittive study with obervation of lessons and interviews with teachers and students would have been more appropriate than a questionnaire.

## Appendix X: Pedagogical focus in learning projects in Hordaland.

- <u>Delingskultur</u>
- Differensiering
- <u>Elevmedverknad /</u> elevdemokrati
- <u>Klasseleiing</u>
- <u>Læringsmiljø</u>
- Omvendt Undervisning
- Prøvesituasjoner / eksamen
- <u>Samarbeidslæring</u>
- Skoleleiing
- Studieteknikk
- <u>Tilpasset opplæring</u>
- Tilrettelagt / spesielt tilrettelagt
- <u>Utforskingsbasert læring / PBL</u>
- <u>Vurdering</u>

Source: www.laringihordaland.no