## Petter Fløttum Bjerkaker

# EFL teacher perceptions of working with the varying reliability of online sources

Exploring Norwegian upper secondary school EFL teachers' focus and work with teaching online source criticism

Masteroppgave i Engelsk- og fremmedspråkdidaktikk Veileder: Eir-Anne Edgar Mai 2022



### Petter Fløttum Bjerkaker

# EFL teacher perceptions of working with the varying reliability of online sources

Exploring Norwegian upper secondary school EFL teachers' focus and work with teaching online source criticism

Masteroppgave i Engelsk- og fremmedspråkdidaktikk Veileder: Eir-Anne Edgar Mai 2022

Norges teknisk-naturvitenskapelige universitet Fakultet for samfunns- og utdanningsvitenskap Institutt for lærerutdanning



#### **Abstract**

This study investigates how upper secondary school English teachers perceive and prioritize working with online source criticism. With the new curriculum and its strengthened focus on critical thinking and source criticism, the digitalization of our classrooms and world, it is of great interest to explore how teachers now perceive online source criticism as part of the English subject. Consequently, online source criticism may be considered as one of the most essential competences in our society. However, there has not been found much previous research on online source criticism within the English subject from Norwegian teachers' point of view, especially after the arrival of the new curriculum LK20.

Thus, the main goal of this study is producing new research-based awareness about how online source criticism in the upper secondary school English subject is perceived and worked with after LK20's arrival, and why it is important today. This is a qualitative study with interviews as its data collecting method. A main finding from these interviews illustrated how even at the upper secondary school level after all their previous years at school with the internet, teachers find their students lacking critical thought towards online sources and will take what they discover on the internet for granted as true. It is then explored how the interviewed teachers reflect upon this and how they address it to improve their students' knowledge of online sources in the EFL-classroom. The findings of this study are discussed in light of previous research, in conjunction with the concepts of digital literacy and civic online reasoning.

This study contributes to research within online source criticism in the Norwegian upper secondary school EFL-teaching context. Findings derived from this study may contribute to an improved teaching practice and generate reflections as to why a focus on online source criticism in the English subject is crucial in developing future critical thinking citizens.

### Sammendrag

Denne oppgaven undersøker hvordan engelsklærere ved den videregående skole oppfatter og prioriterer digital kildekritikk. På grunn av den nye lærerplanen sitt forsterkede fokus på kritisk tenkning og kildekritikk, digitaliseringen av klasserommet og verden ellers, er det av stor interesse å utforske hvordan lærere nå oppfatter digital kildekritikk som del av engelskfaget. Som følge av dette, kan digital kildekritikk tas i betraktning som å være en av de mest essensielle kompetansene i vårt samfunn. Det er imidlertid ikke blitt funnet mye tidligere forskning på digital kildekritikk innen engelskfaget fra læreres perspektiv, og spesielt da med tanke på etter den nye læreplanen LK20 sin ankomst.

Dermed er hovedmålet for denne oppgaven å produsere ny forskningsbasert bevissthet rundt hvordan digital kildekritikk som del av engelskfaget ved den videregående skole oppfattes og jobbes med etter ankomsten av LK20, og hvorfor den digitale kildekritikken er viktig i dag. Dette er en kvalitativ studie med intervju som datainnsamlingsmetode. Et av hovedfunnene fra denne studien illustrerer hvordan lærere ved den videregående skole oppfatter elevene sine som å mangle et kritisk blikk på digitale kilder, og tar mye av informasjonen de kommer over på nettet forgitt til å være sann. Det er da utforsket hvordan de intervjuede lærerne reflekterer rundt dette, og hvordan de håndterer dette for å forbedre sine elevers kunnskap rundt digitale kilder i engelskfagets klasserom. Funnene i denne oppgaven er drøftet i lys av tidligere forskning, sammen med konseptene digital literacy og civic online reasoning.

Denne oppgaven bidrar til forskning innen digital kildekritikk i den norske videregående skoles engelskundervisning. Funnene utvunnet fra denne oppgaven kan være med å bidra til en forbedret undervisningspraksis og generere refleksjoner rundt hvorfor et fokus på digital kildekritikk i engelskfaget er avgjørende for å utvikle fremtidig kritisk tenkende medborgere.

## Acknowledgements

First and foremost, I would like to express my gratitude to Eir-Anne Edgar as my supervisor. I am indebted to her for her valuable feedback and encouragement along the way. Your uplifting words and useful comments were imperative upon the completion of this thesis.

Secondly, I am grateful for my fellow classmates through these two years. The useful discussions, ideas, and overall conversations we shared both physically in class, and digitally when it was not possible to meet due to COVID-19, are simply cherished.

Lastly, the support from my family and friends for which I will be forever grateful.

Trondheim, May 2022

Petter Fløttum Bjerkaker

## Table of contents

Abstract	i
Sammendrag	ii
Acknowledgements	iii
Table of contents	
Chapter 1: Introduction	
1.1 Background and Personal Motivation for the Research	
1.2 Target Group	2
1.3 Thesis and Research Question	2
1.4 Thesis Overview	2
Chapter 2: Theoretical Framing and Previous Research	3
2.1 Introduction	3
2.2 Concepts	3
2.2.1 Traditional source criticism	3
2.2.2 Online source criticism	4
2.3 Definition of Terms	5
2.3.1 Civic online reasoning	5
2.3.2 Digital natives	5
2.3.3 Digital literacy	6
2.3.4 Media literacy	6
2.3.5 Critical literacy	7
2.3.6 Critical digital literacy	7
2.3.7 Fake news	7
2.4 Online Source Criticism and Digital Skills as Part of the New Curriculur LK20	
2.4.1 Basic skills in the English subject – a digital focus for both writing reading	
2.4.2 Basic skills in the English subject from LK06 to LK20 – digital skills	s 9
2.4.3 Source criticism as part of digital skills	9
2.5 Teaching in Today's Digitalized Classroom	10
2.5.1 The Professional Digital Competence Framework for Teachers	10
2.5.2 The teacher as a digitally competent navigator	12
2.5.3 Teachers' attitudes towards using computers in the classroom	12
2.5.4 The role of the textbook versus online sources in the school's litera	<i>асу</i> 13
2.5.5 Using Wikipedia in teaching	14

2.6 Previous Research	15
2.6.1 Usage of digital tools in the English subject at Norwegian upper secondary schools	15
2.6.2 Students' digital habits	
2.6.3 The 2018 PISA-examination	
2.6.4 The Stanford History Education Group and the digital natives	16
Chapter 3: Method and Analysis	
3.1 Interview as a Data-Gathering Strategy	18
3.1.1 The qualitative data analysis	18
3.1.2 Coding	19
3.1.3 Condensing meaning	19
3.1.4 Transcription	19
3.2 Analysis	20
3.2.1 The thematic analysis	20
3.2.2 Semantic themes	21
3.3 Description of the Analysis Process	21
3.3.1 Similarities and differences	22
Table 1	24
Teachers' Usage of Online Sources as Classroom Resource and Amount Focus on Online Source Criticism	
3.4 Validity and Reliability	25
3.5 Ethical Considerations	25
3.6 My Role as a Researcher	27
Chapter 4: Findings	28
4.1 Introduction	28
4.2 Findings From Interviews	28
4.3 LK20 – the New Curriculum	28
4.3.1 The general studies programme versus the vocational study programme	28
4.3.2 Motivation	29
4.3.3 Current focus	29
4.4 Experiences in Using Online Sources and Source Criticism as Part of T Teaching	
4.4.1 Usage of online sources as classroom resource	30
4.4.2 Usage of online sources compared to focus on source criticism in t	their

online sources	
4.5 Online Sources and Source Criticism as Part of the Upper Secondary Sch English Subject	
4.5.1 Online source criticism as part of the English subject	31
4.5.2 Working with online source criticism compared to other areas of the EFL-subject	
4.6 The Use of Online Sources Compared to the Textbook as Teaching Tool	32
4.6.1 Benefits of using online sources	32
4.6.2 Challenges of using online sources	32
4.7 Importance of Developing Critical Thinking Students	32
4.7.1 Attitudes towards Wikipedia	33
4.7.2 In the everyday context	33
4.7.3 The higher education and work context	34
4.7.4 Functioning as foundation for further discussion	34
4.8 The Professional Digital Competence Framework for Teachers	35
4.8.1 Time consuming of the teacher	35
4.8.2 Reflections on having a sufficient focus on online source criticism	35
4.9 Interdisciplinary Attention	36
4.10 Task Dependent	36
4.10.1 Type of tasks	36
4.10.2 Topic relevance	37
4.11 Summary of Findings	37
Chapter 5: Discussion	. 38
5.1 Introduction	38
5.2 Main Findings	38
5.2.1 The impact of the new curriculum and the two study programmes	38
5.2.2 Teachers' usage of online sources and their observance of students' need for guidance	
5.2.3 Task dependency and the role of the teacher	41
5.2.4 Importance of developing critical thinking students	43
5.2.5 Teachers' attitudes towards Wikipedia and usage of online sources versus the textbook	44
5.2.6 The digitally competent teacher	46
5.3 Implications	48
5 3 1 Study limitations	19

5.3.2 Recommendations for further research	49
5.4 Conclusion	49
Reference list	. 51
List of Appendices	. 56
Appendix A: Interview Guide	I
Appendix B: Analyses of Transcriptions – Similarities and Differences	III
Table 1. The new curriculum LK20	IV
Table 2. Teachers' usage of online sources as classroom resource and amount of focus on online source criticism	V
Table 3. Online sources and source criticism as part of the English subject.	VI
Table 4. The use of online sources compared to the textbook as teaching to	
Table 5. Importance of developing critical thinking students	. VIII
Table 6. Professional Digital Competence Framework for Teachers	X
Table 7. Interdisciplinary attention	XI
Table 8. Task dependent	XII
Appendix C: NSD Research Information- and Consent Form	. XIV

## **Chapter 1: Introduction**

For three decades now the internet has provided us with the possibilities of publishing and spreading different types of information impacting our societies (Curran et al., 2016). This may be considered both the greatest benefit, and danger, of the widespread daily use of the internet. The massive flow of information that the internet brings is increasing, and the amount of misinformation and non-trustworthy parties have risen rapidly in numbers to the occasion (Alexanderson, 2012). Prensky (2001) defines today's generation of students as digital natives who have been immersed since the beginning of their lives in digital technologies. They are efficient at using social media platforms, texting friends, and uploading pictures however, this does not mean that they are competent in critical thinking towards the online sources they encounter daily. According to The Norwegian Media Authority (2020), one of the most common free-time activities by the digital natives is the use of the mobile phone and the internet. Frønes and Weyergang (2020) presents further through the 2018-PISA examination that Norwegian students are struggling with considering the reliability of websites, and below half of these students answered that they have been taught to evaluate information from online sources.

The increasing digitalization of the classroom and our world, combined with the digital natives' digital habits and seemingly lack of practice with online source criticism, the teacher's role may be viewed as essential. In both developing students as future critical thinking students, benefitting both their academic development and daily encounters with online sources of varying reliabilities. The goal of this study, and research question, is to investigate how Norwegian EFL upper secondary school teachers perceive and prioritize working with online sources and their varying reliabilities. With the newly arrived curriculum and its strengthened focus on online source criticism, it became a curiosity to explore how teachers are now adapting and implementing this in their teaching (The Norwegian Directorate for Education and Training, 2020a). Additional rationale for this research is the increasing digitalization and great use of online sources in the classroom, as presented in the *Monitor*-report by SINTEF, combined with the dangers of misinformation and fake news today (Fjørtoft et al., 2019).

This study explores how upper secondary school EFL teachers are focusing on online source criticism and attitudes towards the use of online sources, why they believe this is important, and investigates the usage of online sources compared to the traditional textbook in the school's literacy. The teacher's role will be discussed considering the Professional Digital Competence Framework for Teachers by Kelentric (et al., 2017), which is a guiding policy document published through The Norwegian Directorate for Education and Training, the demands of the new curriculum, and what it today may entail to be a digitally competent teacher. Along with concepts including civic online reasoning, digital literacy, and critical digital literacy, to emphasise the importance of working with online source criticism in the classroom. Additionally, why teachers should include this as part of their EFL teaching to develop their students' critical thinking and knowledge of online sources.

#### 1.1 Background and Personal Motivation for the Research

While going through my teacher education, I experienced a lack of focus towards aspects surrounding working with teaching students' critical thinking and reflections. As the new

curriculum arrived with its strengthened competence aims regarding this, I chose to explore this further myself. With how the massive flow of information is having an impact on all of us daily, the digital element of my study came to mind. I have experienced seeing how grown adults for instance use Facebook as their main source of information and taking various online sources for granted as being true. Then I thought to myself, what is being done as teachers to avoid this from happening to our future participating citizens? With English being the lingua franca, and current events from the United States and other English-speaking countries being closely reported and is often of great interest here in Norway, I wanted to investigate how the English upper secondary school subject address this topic of online source criticism. I chose the upper secondary school, based on the competence aims regarding critical thinking and reflection being the most promising and significant at that level. With how present the use of the computer and online sources has become in today's classrooms, along with young people's digital habits, the amount of subjective information exposed to them may be considered as thought-provoking. It then became interesting to investigate how upper secondary school EFL teachers address and prioritize online source criticism as part of the subject, and their attitudes towards developing critical thinking students.

#### 1.2 Target Group

This study is intended for teachers, teacher educators, student teachers, policy creators and educational institutions, and organizations or people overall engaged in the contemporary focus on online source criticism amongst Norwegian teachers. I hope my research will bring forth beneficial information surrounding the field of online source criticism as part of teaching, specifically benefitting for an improved teaching practice within the EFL classroom.

#### 1.3 Thesis and Research Question

The research question for my study is, "How do Norwegian EFL upper secondary school teachers perceive and prioritize working with online sources and their varying reliabilities?". In my research I will be exploring how four upper secondary school EFL teachers position themselves related to my research question, through a qualitative methodology. The chosen data collection method is individual semi-structured interviews.

#### 1.4 Thesis Overview

There are five chapters in this master's thesis, complemented by a list of references and list of appendixes at the end. This initial chapter is the introduction chapter, which introduces this thesis altogether. Chapter two includes both the theoretical framing and previous research, and chapter three consists of the method and analysis behind the research of this thesis. Chapter four consists of the findings in the form of answers obtained from the four interviews. The last chapter consists of the discussion of main findings, implications and limitations of this study, recommendations for further research within the field of online source criticism, and lastly, the conclusion of this thesis.

# Chapter 2: Theoretical Framing and Previous Research

#### 2.1 Introduction

In this research, I discuss how teachers are perceiving and working with online source criticism within the Norwegian upper secondary English subject, and explore whether online source criticism is prioritized and to what extent focused on. I will present previous research along with the theoretical framing for my thesis in this chapter. In the form of statistics, the increasing implementation and usage of digital technology specifically in the Norwegian upper secondary EFL classrooms, the need for developing critical thinking students of online sources, and to give some insight into elements involving what it entails and demands to be a teacher in today's digitalized classrooms. I aim to find out how much attention online source criticism is getting in our EFL upper secondary classrooms, and if this encourages our teachers to develop their students' knowledge of online sources, and in creating the foundation for future critical thinking citizens. With the arrival of the new curriculum, the focus on being able to critically assess online sources should now, in theory, be more present. There are several previous studies I have investigated which assume that the ability to be critical towards information, particularly online sources, is something Norwegian students are not too experienced with or have any significant skills and competence in practicing. It should be a clear necessity that schools should practice critical digital literacy through showing students how they can look for underlying ideologies, by giving them conflicting world views through systematically working with online source criticism.

#### 2.2 Concepts

The concept of source criticism originates from the historical method, with the intent of separating sources that did not provide well-grounded information, apart from the sources that did provide well-grounded information. The sources were originally supposed to reconstruct a reality, and with the intent that they could be used in the future to refer to the discovered knowledge (Leth & Thurén, 2000). Sources were meant to function as providing information and knowledge of our reality, however, historians experienced that some sources could be non-trustworthy. A source is meant to reconstruct a reality from the past, and in the beginning before the arrival of the digital and online sources, they were typically in print or as physical objects. They were then discovered to potentially be in danger of being manipulated, faked, or that the source came to light too late after the incident in question had happened and was then not to be seen as trustworthy (Leth & Thurén, 2000). Resulting of this, it became apparent that every source was not equal, and the separation between fake sources and trustworthy sources, source criticism as we know it, began (Leth & Thurén, 2000). The purpose of source criticism according to Thurén (2005), is being able to assess and determine the sources' credibility and truthfulness, and is not solely relevant for historians or journalists, but rather something everyone can benefit from. Next, the concepts traditional source criticism and online source criticism will be presented.

#### 2.2.1 Traditional source criticism

A source is what we can retrieve information from, and within the traditional source criticism sources are divided into three different types. It can be written sources, that are texts in every form, oral sources through for example interviews and testimony, and

materialistic and physical objects that can provide information (Alexanderson, 2012). In short, the critical approach towards sources can be described as a series of questions that you ask to get a perception of the source's credibility. According to Alexanderson (2012), within the traditional source criticism there are four criteria to consider when checking a source:

- 1. Authenticity: Does the source seem real? Is the source an original or a copy?
- 2. Time: Is the information relevant? Is it an old source? Are there newer sources of the same topic?
- 3. Dependency: Is the source independent? Or is it dependent of other sources? Is the information of the source dependent on other sources?
- 4. Objectivity: For whose interests do the source favour? Does it exist contradictory information from other sources?

If one is used to working with retrieving information and doing research, these criteria are nothing new to the experienced researcher or scholar. However, the most important aspect of the traditional source criticism is being able to establish a critical attitude towards all types of information one encounters daily, and especially on the internet (Alexanderson, 2012).

#### 2.2.2 Online source criticism

Source criticism should be an essential part of our digitalized world, and the reasons are many. The internet provides everyone with the possibilities of publishing and spreading all types of information. This is one of the strengths of the internet, but it also entails encountering different sources with different world views and trustworthiness. Simultaneously as the massive flow of information and number of communication channels online are increasing, the amount of false information and non-trustworthy parties have risen to the occasion (Alexanderson, 2012). To bring up an example, ever since then-candidate Donald Trump in 2016 begun his campaign against what he mocked as the "failing media", "fake news", propaganda, and manipulation of the media as forms of disinformation have become a global phenomenon. This phenomenon is nothing new, however, how this disinformation can spread and ramify within and across our societies, is now more profound and complex than ever (Steensen, 2019). In March 2018, the European Commission published a report on disinformation, arguing that this phenomenon erodes public trust in media, politicians and institutions, degrades political debate, shuts down oppositions where it threatens the integrity of electoral processes and intensifies polarization. All elements mentioned contributes to the undermining of democratic legitimacy and functioning (European Commission, 2018). With the arrival of the new curriculum LK20, the ability to be critical towards online sources has been emphasized even further than before. Within most of the subjects there are own competence aims for this, and the importance of our students being able to critically assess online sources has clearly been acknowledged as an essential part of our nation's goal for education. Furthermore, the digital skill is now regarded as a basic skill, and within this basic skill there are five competence areas. One of those competence areas involves finding and processing information from online sources and apply source criticism (The Norwegian Directorate for Education and Training, 2017). In the English subject, and within other subjects as well, the digital skill of the student is the fourth basic skill, and online source criticism is included (The Norwegian Directorate for Education and Training, 2020c). To include this in your EFL-classroom as a teacher is now emphasised through our Directorate of Education to a greater extent than before, and the importance of it considered as paramount. How the new curriculum includes the

topic of online source criticism, as well as the role of the teacher, reappears more thoroughly later in this thesis.

#### 2.3 Definition of Terms

Never has different types of sources and texts been so accessible for both teachers and students, and students need to consider and think about their choices regarding different sources in today's schools. The internet gives students access to an array of different sources to use for academic purposes, however, the different sources and texts one can find on the internet are not all to be relied on, and the students should have acquired skills and knowledge regarding source criticism. Students today are not solely exposed to the institutionalised forms of texts such as the textbook but are reliant of critical digital literacy and being able to use online sources critically. The following terms *civic online reasoning, digital natives, media literacy, digital literacy* and *critical literacy*, and critical digital literacy will be defined, as well as the term of fake news, and how these can be connected to source criticism. These terms are not meant to indicate that this thesis conducts research on digital literacy, but rather how these mentioned elements can be included and connected to discussing the relevance and importance of teaching online source criticism in the EFL-classroom.

#### 2.3.1 Civic online reasoning

Wineburg and McGrew (2018) define civic online reasoning as the ability to search for, evaluate, and verify online information related to social and political issues, and that this is important and necessary for students to become aware of regarding the social and political choices we as citizens face. According to Wineburg and McGrew (2018), civic online reasoning can be viewed as a subset of the larger topics of digital literacy and media literacy. As described by McGrew, one could even compare the importance of reliable information to the civic health, being as vital as clean air and clean water are to the public health (McGrew, 2019, p.71). The young of today are exposed to the massive flow of digital information, and the health of our world's democracies are dependent on their ability to access reliable information (Breakstone et al., 2021). If our nation's teenagers consume all this overwhelming amount of digital information without the prerequisites of being able to assess its credibility, they may fall as easy targets of the increasing threat that is misinformation. Civic online reasoning particularly regarding this thesis, is to search for and evaluate social and political information. This concept focuses on being able to sort fact from fiction online, which is a prerequisite for responsible civic engagement in the twenty-first century (Breakstone et al., 2021).

#### 2.3.2 Digital natives

The concept *digital native* first emerged defined as a generation of people born in or after the year 1980, immersed since the very beginning of their lives in digital technologies (Prensky, 2001). The digital natives are skilled at switching between social media platforms, texting friends, and uploading pictures, however, when evaluating the information that are exposed to them through all these different platforms, they can be easily deceived. A digital native is a person who has grown up after the widespread introduction of the personal computer, and therefore immersed in digital technology, and it is claimed that by this exposure, a digital native think, behave and learn differently compared to older generations (Bennett, 2012). The natural scepticism of the older generations regarding the arrival of new technological advances, has not been as sceptically experienced for the digital natives. The digital natives may see the technology of today as natural, without the scepticism, and that it has been a part of their lives from

the very beginning. Therefore, the natural scepticism towards it is missing, and while they are skilled at ways of using this technology, the need for and importance of being critical towards what they encounter and read on an everyday basis, is just as important. The young students of today have for some time now been regarded as digital natives, therefore, it is crucial that they are being taught the importance of being critical towards online sources, as it is pivotal for the future.

#### 2.3.3 Digital literacy

For over several decades, the notion of literacy has been extended far beyond its original medium of writing. Going back as long ago as in 1986, it became apparent that a call for attention to new literacies, in describing young children's media-related play, had been deemed necessary (Buckingham, 2015). Literacy is used as a word specific for the English language, and a synonym of the word can be defined as competence or even skill. Digital literacy is one of the newer and contemporary forms of literacy, and as such requires new forms of cultural and communicative competence (Buckingham, 2015). As formulated by the European Information Society, digital literacy is the awareness, attitude, and ability of individuals to appropriately use digital tools to identify, access, manage, integrate, evaluate, analyse, and synthesise digital resources, construct new knowledge, create media expressions, and communicate with others (Martin, 2005, p. 135). Within digital literacy, there is an incorporated literacy called information literacy. The information literacy is associated with critical thinking and the ability to search, locate, and assess online-based information effectively (Wan, 2012). And while learning to use and manipulate digital technology is important, without the understanding of how humans play the role in questioning, challenging, and shaping this techno-social system, then the scope of digital literacy is limited (Pangrazio, 2016). As concluded by Buckingham (2015), if we want to use the internet to teach, we need to equip students to understand and critique it because we cannot view it as a neutral means of delivering information, and it should not be used solely functional or instrumental. The internet and its overabundance of different types of sources in the lingua franca provide new ways of mediating and representing the world, and as a teacher one cannot neglect the students' daily experiences with it and how it can affect them with its massive flow of information. We need to provide students means of understanding it and focus on the importance of being critical towards it, and that is the function of what is discussed as digital literacy in this thesis. Terms such as information literacy, internet literacy, computer literacy, and media literacy have all been connected to effective use of digital resources in teaching and learning and have been emphasized as components of an inclusive view of digital literacy (Falloon, 2020). Further, reaching a singular definition of digital literacy has been challenging over the years, due to the constant evolving technological, cultural, and societal landscapes redefining what, when and how digital technologies are used both personally and professionally (Falloon, 2020).

#### 2.3.4 Media literacy

The term *media literacy* is used synonymous with digital literacy, however, it should be emphasized that there is a clear distinction between the two. All media literacy does not have to be digital, even though more and more texts within media are produced in a digital format and is directly connected to being competent in using, understanding, and creating media texts as well (Blikstad-Balas, 2016a). A definition of media literacy is presented by UNESCO (2013), which underlines how the growth of mass media has created enormous change regarding as to how we as humans communicate and relate to information. UNESCO (2013) emphasizes the importance of raising awareness to

students by giving them the competence, attitudes and skills that are needed to understand the role and behaviour of the media today. Furthermore, UNESCO (2013), defines media literacy as a set of competencies that empowers citizens to access, retrieve, understand, evaluate, and use, to create as well as share information and media content in all formats. By using various tools in a critical, ethical and effective way, in order to participate and engage in personal, professional and societal activities.

#### 2.3.5 Critical literacy

The more classic issues within a critical literacy-perspective are questions of what truth is, and how truths are presented and represented, who are the beneficiaries in the different interpretations of truth, and who should have access to such texts, and with what purpose in mind. Language, texts, and discursive structures are seen as elements constructing and maintaining different pictures of reality. Critical literacy involves being able to view and read text with resistance and criticism, and being able to recognize underlying attitudes, motives, and ideologies (Blikstad-Balas, 2016a). Additionally, critical literacy includes being able to ask questions towards what and whose version of cultural and historical events are being accepted as true and portrayed as official truths.

#### 2.3.6 Critical digital literacy

The concept of critical digital literacy has originated up from the rapidly changing nature of young people's digital practices. In these modern times, the success of young people both as students, engaged citizens and future employees has been connected to critical digital literacy. It has even been claimed by theorists that by lacking the skills to use and evaluate the digital tools now found in both informal and formal contexts, the students are being left behind in several aspects of their lives, from employment to social interaction (Pangrazio, 2016). There are several and various definitions of critical digital literacy, however, for this thesis it is defined as mentioned by Area and Passoa (2012). Within the realm of civic education and part of the students' digital literacy competencies, specifically through the upper secondary English subject in the forms of critical thinking and reflection of online sources and their varying reliabilities. Described further as presented by Douglas Kellner (2001), where this focus advocates a return to the instructional principles of Dewey, highlighting the connection between education and democracy. Kellner (2001, p. 68) writes that a lack of the proper resources, pedagogy, and educational practices, technology can enlarge the already existing divide of cultural capital, power, and wealth, and it is important that the individual acquires an ethical perspective on their engagement with digital forms.

#### 2.3.7 Fake news

According to Kalnes (2017), the concept of false information has existed for as long as we humans have told stories, however, the term *fake news* is of a much more modern origin. Previously, terms such as propaganda, rumours, scams, misinformation, false stories, media manipulation, and lies have been descriptive of false information floating around in our society and would fall within the category of the now more used term of fake news (Kalnes, 2017). Fake news seems to be including an overwhelming number of different terms and one may be unsure of what exactly is meant by it. Therefore, it may be beneficial to present a taxonomy of fake news to get a better understanding, created by Garrett (2019):

1. Fake news in the form of tabloid rumours and satire. Typically, sensational cases originating from magazines of entertainment purposes which is meant to attract the reader's attention. This can in addition be presented through satiric news sites

- such as *The Onion* and *NRK Satiriks*. In other words, cases that have been made up or based on rumours to attract readers.
- 2. Fake news in the form of misinformation. Typically, a probable, but fabricated, story spread through social media using targeted strategies. This type of fake news is connected to the issue of propaganda, where the intent is to spread misinformation to change our opinions as citizens of society. With the help of social media and advanced algorithms cases such as these are being spread effectively.
- 3. Fake news used as a weapon. Used to undermine or reject topics and cases in which one does not agree on. The term is used to for example sow doubts surrounding a case or a news agency that is viewed as a threat to your own interests and agenda.

As described by the taxonomy, fake news needs a wide understanding of the term, containing different forms of different intentions. From rumours, satirical or fabricated news. Fake news can originate even from a simple mistake, or in a more intentional unethical manner created for the purpose of money, with an underlying cause or to undermine (Garrett, 2019). Emphasized by Garrett is the importance of students' understanding of the intent behind fake news, so they can detect it better. Garrett (2019, p.19) says that the pedagogical work in schools is depending on students being able to understand what fake news is, and that they can detect it outside of school as well.

# 2.4 Online Source Criticism and Digital Skills as Part of the New Curriculum LK20

The competence aims for the English subject in the new curriculum include a focus on digital work. In the competence aims for after year 10, it is written that students should be able to use different digital resources and other aids in language learning, text creation and interaction, read factual texts and assess the reliability of the sources, and use sources in a critical and accountable manner (The Norwegian Directorate for Education and Training, 2020a). In the competence aims for after the upper secondary Vg1 programme in English, it is mentioned that the students should be able to use appropriate digital resources and other aids in language learning, text creation and interaction, read and compare different factual texts on the same topic from different sources and critically assess the reliability of the sources, and use different sources in a critical, appropriate, and accountable manner (The Norwegian Directorate for Education and Training, 2020b). For my thesis, which focuses on the upper secondary classroom, the focus on being critical towards various sources and their reliabilities has been emphasized further from the upper-secondary level, and signals that this is something that the students should be taught and needs to be a significant focus in the English classroom. Furthermore, it is emphasized in the assessment of coursework for after Vq1, that the teacher shall plan and facilitate for the opportunity for pupils to demonstrate their competence in various ways, including through understanding, reflection, and critical thought in various contexts (The Norwegian Directorate for Education and Training, 2020b). This assessment encourages students to have a good understanding and skill to reflect upon and manage critical thinking of what is mentioned of source criticism and different types of online sources' varying reliability in the competence aims.

# 2.4.1 Basic skills in the English subject – a digital focus for both writing and reading

Within the basic skill of writing in the English subject in the new LK20-curriculum, the

students should be able to express their ideas and opinions in an understandable and appropriate manner in writing different types of texts, both on paper and digitally. In addition, it is emphasized that the development of English writing skills goes from learning single words and phrases to create different types of coherent texts which convey point of views and knowledge. This last competence aim is supported by it entailing using different types of sources in a critical and accountable manner (The Norwegian Directorate for Education and Training, 2020c). The digital focus does also occur within the basic skill of reading in the English subject. It is written that the development of reading skills in English goes from experimenting with language sounds, spelling patterns, and spelling to read varied and complex texts with flow and understanding, and to a greater extent being able to reflect and consider different types of texts critically (The Norwegian Directorate for Education and Training, 2020c). Being critical towards different types of texts and using different types of sources in a critical and accountable manner, is clearly emphasized within the basic skills for the English subject in the new curriculum. The transition and development from LK06 to LK20 regarding the basic skills of digital skills within the English subject will be presented further.

#### 2.4.2 Basic skills in the English subject from LK06 to LK20 - digital skills

The emphasis on digital skills in the English subject regarding basic skills has been relevant ever since the LK06 curriculum. The two curriculums of the now outdated LK06 and the new LK20 have many similarities regarding this area, such as the focus on being able to use different types of digital tools, medias, and resources to strengthen language learning, communicating in English and acquiring relevant knowledge within the English subject. Furthermore, the similarities of using digital resources to experience English texts in authentic situations, the development of digital skills to collect and process information to create different types of texts, and particularly relevant for my thesis, the importance of using online sources in written and oral texts and having a critical and independent attitude towards source usage (The Norwegian Directorate for Education and Training, 2006;2013). In the new curriculum LK20 it is added that digital skills involve acting critically and reflected with English speaking forms of expression and when communicating with others. Moreover, it is emphasized that the development of digital skills involves exploring the language to communicate with others, creating texts and acquiring knowledge by gathering, exploring and critically consider information from different English-speaking sources (The Norwegian Directorate for Education and Training, 2020c). As mentioned, there are many similarities between the two curriculums, however, one could think that another focus has arisen in the new LK20 curriculum which has been an increasing and problematic issue over the years, which is the controversial topic of fake news and the need for more critical thought when it comes to different digital platforms. The overflow of information students is exposed to and it being more accessible than ever to hop on the computer, iPad, iPhone, or other digital devices makes for a great attention towards shaping digitally competent and source criticising students. Especially when students are now learning English at such a fast rate and from such a young age. These students may find themselves understanding the language, however, may not think twice about what the sources are and who is behind what they are exposed to and reading daily.

#### 2.4.3 Source criticism as part of digital skills

Under the framework for basic skills the digital skills are elaborated (The Norwegian Directorate for Education and Training, 2017). The digital skills are divided into five

distinct areas: using and understanding, finding and processing, producing and editing, communicating and interacting, and executing digital judgement. I will delimit myself to the area of finding and processing, because of my thesis' focus on the reliabilities of online sources and source criticism. Within this area there are five levels of increasing demands to competence (The Norwegian Directorate for Education and Training, 2017): Level 1: Completes simple searches to obtain information in digital sources and uses information in own learning. Familiar with simple digital source-usage and copyrights. Level 2: Finds, saves, and rediscovers information in digital sources and refers to these sources.

Level 3: Evaluates, organizes, and uses information from digital sources appropriately and follows the rules of copyright.

Level 4: Reshapes and compiles information from digital sources and evaluates the sources critically.

Level 5: Interprets and evaluates information from different digital sources critically and manages copyright of own work.

As presented by the levels above, it becomes apparent that the topic of source criticism does not appear until levels 4 and 5 (The Norwegian Directorate for Education and Training, 2017). Thus, source criticism can be described by the framework as an advanced competence for students to master and may require a significant amount of time and attention to focus on by the teacher.

#### 2.5 Teaching in Today's Digitalized Classroom

Teaching in today's classroom is influenced by several digital elements. For instance, the need for professional digital competence and the usage of online sources as classroom resource compared to the traditional textbook. The following paragraphs will account for a description of The Professional Digital Competence Framework for Teachers (Kelentric et al., 2017), and what aims this framework has for the development of a digitally competent teacher today, more specifically for this thesis regarding teaching online source criticism. Moreover, how one as a teacher may function as a navigator for students when digitally competent, and an insight into different teachers' attitudes towards using computers in the classroom. Additionally, how the use of online sources is positioned in the school's literacy compared to the traditional textbook, and finally, the usage of Wikipedia in teaching.

#### 2.5.1 The Professional Digital Competence Framework for Teachers

The Norwegian Centre for ICT in Education published in 2017 the framework called the *Professional Digital Competence Framework for Teachers* written by Marijana Kelentric, Karianne Helland and Ann-Therese Arstorp, and is meant to cover all subjects, published through The Norwegian Directorate for Education and Training. It is important to note that the framework is a guiding policy document, and not a required framework. The Professional Digital Competence Framework for Teachers is meant to be used by policy developers, heads of department, teacher educators, teachers, student teachers and others for use as reference in their work on improving the quality of teacher education and systematic continuing professional development of teachers. However, the teachers' professional digital competence is dynamic, complex, and influenced by developments in society. As a result of this, the framework is set to be updated regularly, in line with the influence digital developments have on the teaching profession and education system in general (Kelentric et al., 2017). The intent behind it is that this document will establish a common conceptual framework and frame of reference for what teachers' professional competence entails (Kelentric et al., 2017). The centre's mission is to help ensure that

ICT, or Information and Communications Technology as it is more precisely named, is used to improve the quality of education, learning outcomes, and learning strategies for young children, pupils, and students. The framework emphasizes that today it is more important than ever that students are critical users and active producers, and not merely passive consumers of products, services, and information (Kelentric et al., 2017). Additionally, it mentions the role of the teacher of needing to be able to foster students that can identify credible information, quoting sources, protecting their intellectual property, applying ethical values and attitudes in communications and interaction, producing their own digital resources, and developing a reflective relationship to their own and others' actions, cultural differences, values, and rights (Kelentric et al., 2017). It says in the framework further that the role of the teacher is key in this context, and there are two main reasons highlighted. The Professional Digital Competence Framework for Teachers consists of two aims: one centres on professional development, and the other around the actual practice of the profession (Kelentric et al., 2017). To be capable of developing the students' basic skills and knowledge, teachers need to develop their own professional digital competence during their initial teacher education, and later, through continuing professional education and development during their teaching career (Kelentric et al., 2017). This framework is based on national regulations, guidelines for teacher education programmes, the national curriculum, the Basic Skills Framework, and the National Qualifications Framework, and consists of seven competence areas, which contain description of knowledge, skills, and competence.

Regarding my thesis and area of research, I have chosen the following points involving source criticism to focus on. Under the competence area Subjects and basic skills, it is written that a professional, digitally competent teacher understands how digital developments are changing and expanding the content of subjects. In addition, that the teacher understands how the implementation of digital resources into learning processes can help to achieve competence aims in a subject, and to address the five basic skills, however, for this thesis the basic digital skills and more precisely in the form of source criticism. According to the Subjects and basic skills competence area, the teacher should possess knowledge of understanding how digital developments are creating a need for critical assessment, organisation, and increased opportunities for access to and sharing of professional knowledge (Kelentric et al., 2017). Under the competence area called School in society, it is described that a professional, digitally competent teacher should be familiar with perspectives on digital developments and the importance and function of digital media today. Furthermore, under skills that the teacher should possess under this competence area, it is mentioned that the teacher should be able to guide students in their active participation in digital media and help ensure that they develop a reflective relationship to digital arenas (Kelentric et al., 2017). Under the next competence area called Ethics, it is written that the teacher should be able to contribute to developing students' digital judgement, understanding and ability to act in line with these. Within this competence area and under the topic of skills that the teacher should possess, it is emphasized that the teacher should be able to apply and teach the rules on intellectual property, privacy, data security, source criticism, and the correct use of sources (Kelentric et al., 2017). The concept of professional digital competence was introduced in 2012, and the centre viewed this as important to highlight the key role the teaching profession plays in realising digitalisation in schools, and the development of digitally competent students (Kelentric et al., 2017). In summation, the professional digital competence is the composite competence which is now seen to be important for teachers for their own professional development, and that it is equally important so the students

can develop their basic digital skills as the intentions of the curriculum (Guðmundsdóttir & Ottestad, 2016, p.72).

#### 2.5.2 The teacher as a digitally competent navigator

Blikstad-Balas (2016b) discusses through her own research how as a teacher one can serve as a navigator using technology in the classroom, resulting in a good learning environment where the students see the teacher as a technological role model, and how the students should feel comfortable and master a critical lens when using their computers. However, the issue that she contemplates the most, is the lost potential of the academic usage that research does not find, the lack of academic aims regarding using digital technology and the lack of systematic training which can increase students' digital competence (Blikstad-Balas, 2016b, p.145). She underlines that there are an infinite number of ways to implement and increase academic use of technology, however, there are some points mentioning using the internet in a considerable way and the benefits of source criticism relevant across all subjects, which I find relevant for my thesis to point out. Regardless of subject, it will be beneficiary for the students to be exposed to different depictions of what they discuss in for example the English subject, and not to be exposed solely to the textbook's depiction of the topic's reality. There is for example no historian who relates to and uses only one source and one depiction of the course of history (Blikstad-Balas, 2016b, p.146). This is where the internet can be a flexible and easy tool for students to access texts and finding information far more comprehensive than of their textbooks. However, for the students to use the internet and its resources, they need to be navigated and supported by the teacher. An area that will benefit schools through using digital technology is the focus on and importance of source criticism, and the ability to navigate safely and critically through the ever-expanding amount of text and information on the internet (Blikstad-Balas, 2016b). The students' ability to navigate themselves with purpose and simultaneously be critical towards the great number of potential sources they encounter, is key to succeed in finding and using sensible sources (Blikstad-Balas, 2016b, p.147). Moreover, through the research conducted by McGrew (2020), it was found that improving the students' civic online reasoning and critical thinking of online sources, was effective through working with controversial topics in class. The students' ability to evaluate online information improved on topics that addressed controversial content, for example minimum wage, nuclear radiation, the Civil war in Syria, and immigration. It was further discussed that as students now turn to the internet to the highest degree in finding this sort of political information, the civic health of our communities is decreased if our students struggle to distinguish between high-quality from unreliable content (McGrew, 2020).

#### 2.5.3 Teachers' attitudes towards using computers in the classroom

The study carried out by Atle Kristensen, "What promotes and prevents the usage of digital technology – viewed from the teachers' perspective" (2020), is qualitative research with interviews of teachers with different main subjects, one with mathematics, two with language subjects, and one with foreign language. The teachers are from different schools and expressed through these interviews how they view some of the greatest benefits of using computers in their teaching, and their attitudes towards it. When teachers implement technology in their classroom, it is motivated by different pre-existing attitudes towards technology, and they may possess different levels of digital skills themselves, however, one benefit from using computers in their classrooms was clear from this study: the effectiveness of using technology to retrieve information online (Kristensen, 2020). The article discusses that both the teachers themselves and the

students are benefitting from using technology to retrieve information online for their own presentations and teaching, and the students retrieving information online when working in the classroom on their computers. Regarding the students' own work with technology the teachers who were interviewed said that their experiences varied, however, they agreed upon that the usage of technology in the classroom is especially efficient and less time-consuming for their work when searching for relevant information (Kristensen, 2020). Summarized, the results from this research showed that the teachers interviewed supported the usage of technology in the classroom and described it to be efficient and less time-consuming for their work. This was particularly emphasized through retrieving relevant information online, however, the teachers who were interviewed did not describe a more advanced use of the computer other than of letting the students use Google to search for and find information. The reason behind this lack of a more advanced use of technology in the classroom, was described to be because of the teachers being unsure and not confident enough in their own digital competence (Kristensen, 2020).

# 2.5.4 The role of the textbook versus online sources in the school's literacy

Concerning time, textbooks and books are linear. That means that what is written in a book of facts from the year 1910 will remain unchanged. Printed media is static, and the positive side to such traditional media, is that one can easily observe and follow a development from then to now (Alexanderson, 2012). On the contrary, the internet is filled with information that can be potentially edited, where sources appear, establish themselves, and disappear. Information on the internet become replaced with new and more updated facts, because online sources and the information in which they convey, is dynamic (Alexanderson, 2012, p. 17). In the educational context, and what makes our schools different from other institutions, is that the schools possess their uniquely own type of texts, the textbooks, which directly results in the direction of what type of textual practices the school are obligated to convey to its students. The textbook falls into the category of pedagogical texts, used for learning situations and is intimately connected to certain institutional frames and usage (Blikstad-Balas, 2016a, p. 73). Even though there are different types of texts that have the common goal of teaching certain target groups within an institutional frame, it is the textbooks that have for the longest time had the most central role as pedagogical texts in school. An obvious reason for this is that the textbooks are created to meet the demands of the curriculum, and that we can see the textbook as direct interpretation of the curriculum's subject- and knowledge-views (Tønnesen, 2013, p. 149). Additionally, the interpretation of the curriculum's subjectand knowledge views done by the textbook's authors, has a direct impact on how teaching occurs, because a significant number of teachers use the textbook actively when planning their teaching (Bachmann, 2005). However, speaking of the usage of online sources in the classroom, it is worth mentioning that the growing usage of online texts used in today's classrooms is viewed as supplement to the textbook, and not as replacement. Particularly there are said to be two reasons as to why the school's literacy can be strengthened by the growing digitalization today; the school's literacy becomes more individualized, and less anchored to the traditional textual practices (Blikstad-Balas, 2016a, p. 86). If students have access to the internet, it means they can seek out alternative subject texts and use additional online sources for knowledge, however, students are additionally getting the opportunity to spend their time reading texts of no academic value as well, which is something that may need to be monitored by the teacher. It may not always be obvious what content is suitable for the classroom task

because there is so much available online, both for students and the teacher, and it can be confusing as to exactly what is acceptable within the school's literacy. An example of this can be Wikipedia because both students and teachers seem to not be evaluating this online encyclopaedia's suitability evenly (Blikstad-Balas, 2016a, p.92). Another connection between the textbook and the use of Wikipedia, is that the students may be used to source material in the form of the textbook being already quality checked for them and they do not need to be critical towards it. According to Blikstad-Balas and Hvistendahl (2013), there are even similarities seen between the reproduction of knowledge which occurs when using the school textbook and Wikipedia. If students are bringing this textbook practice over to the digital world of the internet and towards its different types of sources, it may very well be reason for concern.

#### 2.5.5 Using Wikipedia in teaching

Even though the young students of today, the digital natives, possess the technological competence that is needed for searching for information online, it can in no way be taken for granted that they have the analytic and academic competence needed to critically assess the online sources they use (Blikstad-Balas & Høgenes, 2014). This is where the teacher's role is so important because the teacher's own perception and attitudes towards different online sources, has a direct impact on what type of sources the students are using for their work in the classroom. The impact that the teacher has on the students is again strengthened if the students are working with and using internetbased learning resources, such as Wikipedia (Furberg & Rasmussen, 2012). In the research by Blikstad-Balas and Høgenes (2014), it was found that the students will adapt their own practice in accordance with the teacher's attitude towards using Wikipedia as a reliable source. It was further discovered that it is the accessibility of Wikipedia that is viewed as the biggest benefit and used for defining terms or looking up general information. However, the varying quality of content, or rather, the teacher's lack of focus on the varying quality of content, were found to be the most significant disadvantage (Blikstad-Balas & Høgenes, 2014). It was found through one of the interviews, that the students at the upper secondary school where one of the interviewed teachers worked, would use Wikipedia to retrieve information to complete the task and add other sources without using them or been critical towards them. This was to fulfil the demands from the teacher. One of the other teachers said that she was not satisfied with the amount of time she had used to develop her students' knowledge of online sources, and that this was something she was intending to include more in the future. It is important to have in mind that this research was before the new curriculum, and in my own research I intend to find out more about teachers' practices when it comes to developing the students' knowledge of online sources through the English subject, and how the new curriculum amongst other elements may have changed this practice. Wikipedia has been viewed as increasingly more trustworthy in more recent years. There are professional fact checkers who conduct their research by checking Wikipedia and its references as an example when wanting to find out more about a website's author or organization (McGrew, 2020). However, there is a clear distinction between professional fact checkers and students who use Wikipedia without being critical towards it. Students will often click on the first or second result that appear, with the belief that the higher a site is listed in the results, the more trustworthy it is (McGrew, 2020). Therefore, it becomes such an important element for the teacher to be aware of, to develop the students' critical thinking regarding online sources. This is an interesting element of how the perception of Wikipedia may have changed in the classroom in recent years as well

and may depend on the teacher's personal view and use of Wikipedia, which is something I include in my own research.

#### 2.6 Previous Research

This section includes previous research in the form of national reports and the 2018 PISA-examination, in addition to a comprehensive study undergone in the United States of America. The following previous research entails a descriptive mapping of the digital conditions in Norwegian schools, Norwegian students' digital habits and encounters with fake news through social media, the 2018 PISA-examination which tested Norwegian students' abilities to read critically, and finally the study from The Stanford History Education Group in the United States, mapping students' ability to consider information they encounter on the internet critically.

# 2.6.1 Usage of digital tools in the English subject at Norwegian upper secondary schools

The *Monitor*-report by SINTEF in 2019 is a descriptive mapping of the digital conditions in Norwegian schools, and its main findings originates from the digital practices being regulated by didactic assessments, learning objectives and age of the students (Fjørtoft et al., 2019). Compared to the report from Monitor 2013 and 2016, both students and teachers have reported a more diverse usage of different digital resources, and in general a more significant use of the computer (Fjørtoft et al., 2019). In the area of this study regarding the upper secondary, it was at the VG2 level, and the study looked at how much students in the English subject used their computers in the classroom. The subjects that were looked at were mathematics, Norwegian, English and history, and the English subject came in as the second highest when it came to how much the students use their computers. To put these results in perspective, the Norwegian subject was of the largest significance with 81,5 percent as to how much of their teaching was influenced of using their computers in the classroom, and the English subject had the second largest with 76,4 percent of their classroom activities were influenced by computers (Fjørtoft et al., 2019). Furthermore, it was found in this report exactly what students were using their computers for when working with them in the classroom. For the upper secondary VG2 level, it was found in percentage that the three highest activities were text creation at 97,9 percent, create presentations at 96,2 percent, and search for/finding information on the internet at 95,6 percent (Fjørtoft et al., 2019). These three activities at the top are all connected to the basic skills, and the high percentage of searching for and finding information on the internet, should raise awareness and a clear focus towards teachers' attitudes and the work on implementing online source criticism in their classrooms.

#### 2.6.2 Students' digital habits

According to The Norwegian Media Authority (2016), the young of today are growing up in a digitalized world, and they use the internet and digital communication for most of the aspects in their lives. A great amount of their social interactions is indeed occurring through screens, and the usage of mobile phones and the internet is one of the most common free-time activities done by young Norwegians (The Norwegian Media Authority, 2016). Most of them have access to the internet and the endless varieties of English texts and sources of varying reliabilities, wherever they may be, and because of this, it is important to acknowledge it and navigate students through the topic of source criticism. In the newer report from The Norwegian Media Authority (2020), one of the main findings were that 97 percent of 9–18-year-olds are in possession of their own mobile

phone, and 70 percent of 9–18-year-olds have their own PC. The main finding regarding source criticism and fake news, two out of three 13-18-year-olds have experienced news that they suspected was false in the last year, and the most of them, six out of ten, did nothing the last time they had this suspicion, and lastly, 66 percent of 13-18-year-olds who had seen news in the last year that they suspected was false, originated from social media (The Norwegian Media Authority, 2020).

#### 2.6.3 The 2018 PISA-examination

In the newer 2018 PISA-examination, Norwegian students were tested in how well they were able to read critically. Frønes and Weyergang (2020) researched the 2018 PISA-examination with this in mind, and they found that students struggled with rating the credibility of websites and justifying their choices. Only 13 percent of students answered correctly on questions regarding credibility, and the rest of the students from the OECD-countries answered correctly on 17 percent. Frønes and Weyergang (2020) meant that the students from Norway tended to justify their choices based on the appearance and the contents of information of the websites. Below half of the students answered that they have been taught the usage of good search words, and to evaluate information and fraud. Simultaneously, 82 percent of the students answered that they have received instruction regarding being cautious of information on the internet. The authors of this research, Frønes and Weyergang (2020), are firm about there being a need for academic development in the way students are learning to think critically.

#### 2.6.4 The Stanford History Education Group and the digital natives

Similarly, to the studies undergone here in Norway, the Stanford History Education Group (SHEG) had an interesting study in 2016 in the United States regarding students' civic online reasoning, which is the ability to judge the credibility of information that floods their smartphones, tablets, and computers (SHEG, 2016). Between the span of January 2015 and June 2016, the Stanford History Education Group gave out 56 tasks to students across 12 states, and through these tasks collected and analysed 7,804 student responses. The schools they gave their tasks for testing to were both under-resourced inner-city schools in Los Angeles, well-resourced schools in the suburbs outside of Minneapolis, and tasks were in addition administered online at six different universities, which included the prestigious Stanford university, and to larger state universities (SHEG, 2016). When summarizing the results from their study, from middle school, high school, and college, it was a varying number of answers, however, there was a common denominator amongst it all. Overall, the study found the students' ability to think critically about the information on the internet to be concerning and bleak (SHEG, 2016). Furthermore, in the next steps chapter of the study from SHEG, it is emphasized that teachers need a curriculum that is focused on the students' civic online reasoning, and this can be compared to how the new curriculum here in Norway has developed into focusing more on this topic as well. Additionally, mentioned in this next steps-chapter, there is a call for awareness of the problem. SHEG (2016) underlines the importance that they had little knowledge of the depth of the problem beforehand, and initially thought that many of the designed tasks were deemed too easy for the digital natives. However, they were shocked into the reality of the results, and many would assume that because these students have mastered social media and all its perks and platforms, that they were to be equally fluent in understanding what they find there. The work done from SHEG (2016) shows the opposite, and they worry that these findings illustrate a threat to democracy and signalise a call for greater attention towards young people's digital literacy. Furthermore, connecting the results of a study undergone here in Norway by

Strømsø and Bråten (2014) to the works of SHEG (2016). Strømsø and Bråten (2014) concludes that the internet provides a wealth of information resources, offering opportunities for students to access information regarding everything they may wish to investigate. The internet also provides the opportunity for everyone to publish whatever they may wish to convey, without it being checked for reliability, honesty or of it being overall adequate and honest. Resulting from this, students should be critical of the information they encounter on the internet, where paying attention to and reflecting on the online source's reliability, are essential parts of critical reading and mastering source criticism (Strømsø & Bråten, 2014). In my own research, I intend to highlight how teachers specifically at the upper secondary level perceive and prioritize this in the English subject classroom, how they implement it, and why they believe this is important.

## **Chapter 3: Method and Analysis**

#### 3.1 Interview as a Data-Gathering Strategy

The semi-structured interview has the form resembling of both an open conversation and a closed questionnaire. I used an interview guide during the interviews so that as an interviewer I could remember all my subtopics and main questions that I wanted answers to, however, it functioned only as guidance. As a phenomenological researcher I was in the search of precise descriptions of how certain phenomena is experienced from the first person-point of view. In the interview context, I got the opportunity to focus on how the interviewees perceived certain events, situations, and phenomena in their own lives (Brinkmann & Tanggaard, 2012). For my research, I wanted to get insight in how Norwegian EFL upper secondary school teachers perceive and prioritize working with online sources and their varying reliabilities. Through my interviews I received detailed experiences of certain situations and own personal thoughts regarding the presented topics through my interview guide. Several of the questions from my interview guide were open, giving the teacher the opportunity to expand on what occurred as natural to them. To help ensure creating questions that could produce manageable answers in my analysis of the empirical data, I looked at the twelve aspects of the qualitative interview from a phenomenological standpoint (Kvale & Brinkmann, 2009, pp. 28-32). All the aspects will not be gone through in detail however, some were found to be fitting and in aid regarding my work with analysing the empirical data. These aspects helped me in assuring that the questions I asked could bring forth meaningful, precise, and relevant answers, that could help in analysing and categorising the material further. Meaning is one of the aspects and it might be the one of greatest importance. The goal of the interviews was to understand how the teachers perceive and prioritize working with online sources and their varying reliabilities in their lifeworld, and the questions were formed thereafter. Through the interviews I had the aspect of specificity in mind, through asking questions that required answers describing specific situations. These questions invited the teachers to give descriptive answers of specific situations in the classroom, which helped in categorising the answers. The interview guide ensured that the interviews were focused and helped me ask questions within the different relevant areas of my research topic (Kvale & Brinkmann, 2009). Simultaneously, the questions were formed so the teachers were able to express their opinions and immediate thoughts on the matter, where there was no feeling of right or wrong answers. The semi-structured interview made sure as well that follow-up questions felt natural, often in the form of justifying why or why not they agree with the question. The interview should optimally proceed as a regular conversation, but with a specific purpose and a structure of its own. One should strive towards memorizing the interview guide, however, in my experience I felt that the main questions made the interviews fragmented, but the follow-up questions I provided created a more dynamic and natural feel to the conversation (Kvale & Brinkmann, 2009).

#### 3.1.1 The qualitative data analysis

The purpose of the qualitative data analysis is to structure the empirical material that has been collected, to make the material more understandable (Postholm & Jacobsen, 2018, p.139). As for any qualitative research, the empirical material can be quite comprehensive. Therefore, it is important to look for patterns, so the material can be placed in categories or under different topics, to get an overview which makes the

findings presentable to others in written text, as a descriptive analysis (Postholm & Jacobsen, 2018). As a researcher with a phenomenological analysis strategy, you want to gather concrete, life-world descriptions to understand the phenomenon I was asking questions about (Crotty, 1998, p.83). The analytic process is an action moving between analysing and breaking down the material, synthesizing by building it up again and find additional meaning through findings, and with the goal of ending up with an overview of the material that illustrates new contexts that was not obvious in the beginning. Other times it can result in the opposite, where the findings illustrate a lack of context, but present a new view through contradictions and discontinuities. I seek to integrate single parts in my material into greater wholes (Brinkmann & Tanggaard, 2012, p. 37).

#### *3.1.2 Coding*

The codes that I looked for were data-driven, the type of codes that occur inductively through the material itself (Brinkmann & Tanggaard, 2012, p. 39). I had through the help of my interview guide certain topics that appeared obvious to touch on, such as the topic of the new curriculum and to what extent the use of online sources was present for each of the teachers. However, the keywords and segments that were highlighted in the coding process appeared after completing the interviews through their individual and different answers. Thereby, the data occurred inductively through the interviewees' answers.

#### 3.1.3 Condensing meaning

By condensing meaning, it is meant by boiling the statements from the interviews down into smaller units of meaning, with the following categorization and coding. The analysis is present through the whole interview, and it will be pointed out if it occurs repetitions or contradictions across the different statements. Simultaneously, through this technique one can become aware in the analysis of any similarities or differences in relation to the other interviews (Brinkmann & Tanggaard, 2012, p. 42). To condense meaning, I had to see the material from each of the interviews first and read through them in their entireties.

#### 3.1.4 Transcription

The transcription is seen as a key phase of the data analysis within interpretative qualitative methodology, where meaning is created through an interpretative act (Braun & Clarke, 2006). There has been developed several different systems of transcribing over the years, however, it depends on what you want to find out as a researcher to determine what technique is the most purposeful. I have chosen the transcription system recommended for novice interviewers, and the technique that primarily intends to capture the meaning behind the content uttered by the participants (Brinkmann & Tanggaard, 2012, p. 34). The transcriptions were created manually, where I listened to the audio recordings and wrote everything down as I listened on. The process was timeconsuming, however, I found it helpful to do it in such manner. I experienced initial analytic thoughts when listening, and through the transcribing process some of the categories came naturally in the form of ideas when listening and writing down what was said. I indicated with initials for the person who was talking. IP for interview participant and R for researcher. The transcriptions are marked Transcription A, Transcription B, Transcription C, and Transcription D, for every interview participant. There are no details in the transcriptions that can identify them because the questions did not concern the teachers' identities or regarding their personal backgrounds. I attempted to write the

transcriptions as precise as possible, and to write the utterances correctly to prevent any misinterpretation of their opinions and answers.

#### 3.2 Analysis

The process of analysing the interviews started with writing down summaries of the translated transcriptions. I wrote a summary for each of the answers that the teachers provided, to shorten them and compress the meaning into the essentials. In doing this I had to read their answers carefully, often several times, to extract the most relevant and important elements. When reading through the answers from the interview, it became clear what categories and which topics that felt natural to include in further analysis. Initially I read through the transcriptions looking for relevant words and phrases which I then marked with different colours belonging within different themes. Going through the data made for discoveries of similarities, what meanings and themes were repeated across all interviews. Thus, by condensing meaning it illustrated both what the teachers shared of experiences and opinions, and what elements that were not as much focused on across the participants. Instead of writing the summaries by hand on paper to create an overview, I used the "create comment"-function on Word and commented on each of the answers in the form of summaries and key words. Additionally, I marked key words and phrases of relevance regarding the themes, with different colours to place them into each category. The findings were highlighted with different colours for each of the eight categories. The intention behind trying to make sense of the empirical material this way, is to look for similarities and see how often these categories occur across all participants' answers in the interviews.

#### 3.2.1 The thematic analysis

I chose the thematic analysis to make sense of and organize my data. By identifying, analysing, and reporting patterns, which in this instance were themes, within my data material. Within the social constructionist epistemology, the patterns are identified as socially produced through a search undergone through the interview method (Braun & Clarke, 2006). Furthermore, the thematic analysis in the world of the constructionist, seeks the purpose of examining the ways in which events, realities, meanings, and experiences of the person interviewed are the effects of a range of discourses operating within a society. Typically, a small number of subjects are studied, and the researcher sets aside his or her own experiences, to truly understand the participants' experiences regarding the phenomenon (Creswell, 2009, p. 13). The thematic analysis in my research has the purpose of unveiling and reflecting upon the reality of the data surfaced through interviews (Braun & Clarke, 2006). To properly use the thematic analysis, it is paramount to define what counts as a theme in the coding process. This is a question of importance in terms of each data item, and I as a researcher needed to determine what each of the themes were. If I were to determine this appropriately, I needed to give myself some flexibility, and decide if what is included within each theme capture something of importance related to my research question (Braun & Clarke, 2006). There is no right or wrong way of determining the themes I chose to focus on, but it was important that I was consistent with how I analysed and defined them through each individual interview. After reading through the transcriptions of interviews, it became apparent that some themes were reoccurring more frequently. However, I depended on the answers given from the interviewees to be able to search for, determine and define each of the themes I found the most promising and reoccurring. As previously mentioned, the themes for my research were identified inductively, where they are strongly linked to the data themselves. Within this approach, the themes I decided to focus on were not based on

presumption of my own theoretical interest in the topic, nor predominantly and solely determined by the questions I asked. It was not the intention to try and fit the data I collected into a pre-existing coding frame or my own analytic preconceptions, thus being a data-driven inductive thematic analysis (Braun & Clarke, 2006). The thematic analysis for my research involves searching across a data set, which is my interviews, to find repeated patterns of meaning (Braun & Clarke, 2006).

#### 3.2.2 Semantic themes

The levels in which the themes were identified, were through what is called the semantic level. Within the semantic approach, the themes were identified within the explicit and surface meanings of the answers given in the interviews. As the analyst, I did not find it appropriate to speculate or look for anything beyond what the participants has said. My analytic process involved the progression from description, where my data was organized to showcase patterns through highlighting with different colours and placing utterances and key words into categories. Furthermore, discovering meanings through summarizing translated transcriptions, and a further interpretation of my material to find significance of the patterns and broader meanings and implications, often in relation to previous literature (Braun & Clarke, 2006). I chose the semantic approach to identify themes rather than the latent approach, because I did not see it as possible, or rather suitable, to try and speculate as to any reason for motivation the participants had for their answers, beyond exactly what was said in their own words.

#### 3.3 Description of the Analysis Process

The thematic analytic process has six phases which I chose to have in mind. These six phases are familiarizing myself with the data, generating initial codes, the search for themes, reviewing these themes, defining, and naming the themes, and finally producing the report (Braun & Clarke, 2006). First, I transcribed my data which were the interviews, and I read them several times and ideas of potential categories occurred. Then I generated the initial codes, where I colour-highlighted features and excerpts from the transcriptions, across the entire data set, I found to be interesting. With the initial thoughts in mind, I looked for similar patterns and similarities in every interview and gathered all the information I could find for each initial category. Then I reviewed my categories to see if they still were satisfactory and worked in relation to the highlighted extracts and codes. I then proceeded to have an ongoing analysis to specify each category, and what the overall analysis told me, which then produced clear definitions and names for each of the categories. Finally, I was to select compelling extract examples, final analysis of selected extracts, and relate my analysis back to the research question and literature.

After analysing my material initially, I had four categories. However, in diving deeper into the material I saw the potential of creating and expanding into eight categories that were highlighted in different colours. Each of the new categories were more precise and narrowed down than the previous ones, and each of the new categories were supplemented with their own subcategories. In adding subcategories, I was able to look at my data even more precisely and it was of great help in organizing and fulfilling a greater understanding of my data material. The first category is the new curriculum LK20, with the three subcategories: *general studies programme vs. vocational studies programme, motivation,* and *current focus.* The next category is named *Teachers' usage of online sources as classroom resource and amount of focus on online source criticism,* with the three subcategories: *usage of online sources in their teaching, usage of online sources compared to focus on source criticism in their teaching,* and lastly, *students* 

expressing need for guidance in being source critical. The third category is named Online sources and source criticism as part of the English subject. This category has two subcategories: As part of the English subject and compared to other areas of the English subject. Category number four is the use of online sources compared to the textbook as teaching tool. This category has the two subcategories: Benefits and challenges. Further, the next category number five out of eight, is called Importance of developing critical thinking students. This category has four and the most subcategories of any of the categories. These subcategories are Attitudes towards Wikipedia, in the everyday context, the higher education and work context, and lastly, functioning as a foundation for further discussion. Out of the three remaining categories, one of them do not include a single subcategory, as the first and only category to do so. This category is called interdisciplinary attention, and the data analysed through this category revolves around each teacher's personal beliefs, their school's interdisciplinary work with online source criticism as topic both in the classroom and working together with colleagues, and in what ways this topic can be relevant when working with other subjects and topics. The last two categories are named professional digital competence framework for teachers (PDCFT) and task dependent. The PDCFT-category includes two subcategories: time demanding and focus. This category is not directly linked to the professional digital competence framework for teachers as it was not mentioned explicitly in the interviews. However, the answers given from the interviewees were found to be fitting under this category, and with the subcategories regarding how they may find working with online source criticism as time demanding as a teacher, and how they reflect upon their own focus as a teacher working with this topic. The last and final category that I used for my analysis is as mentioned task dependent. The two subcategories are: types of tasks and topics. In creating more precise categories with elaborative subcategories, it was key in understanding and organizing my material even further. This is an example of how as a researcher I found it essential to dive into the gathered material several times, read it over and over, and while working with the data you can suddenly become aware of new approaches to your data and discoveries along the way.

#### 3.3.1 Similarities and differences

Further, I chose to look at similarities and differences in the gathered interview material. Asking questions and doing comparisons are central strategies when analysing data (Postholm & Jacobsen, 2018, p.154). Conducting comparisons can be achieved in several ways, however, for this thesis I chose to focus on *constant comparisons*. The constant comparisons found in this thesis were done by looking at similarities and differences in the interviewees' answers. This type of comparison has the goal of helping me as a researcher in separating the categories from each other, and in identifying distinct characteristics and dimensions for each of my created categories (Postholm & Jacobsen, 2018). By implementing this analytic constant comparison strategy, discussed by Postholm and Jacobsen (2018, p.154), I was in addition able to identify similarities and differences in the answers within each of my categories and more precisely subcategories, for example teachers' personal usage of online sources and focus on being source critical, or of their impression towards their students expressing the need for guidance in being source critical. Differences are defined by deviations in meaning of participants' answers. The meanings are defined exactly from the literal utterances of participants, and there has not been made any presumptions or guessed meanings. From the researcher point of view, I have considered any ironic or unserious answers given, however, through my analysis I have not made any discoveries of answers of such nature. The deviations can involve personal opinions or preferred teaching methods, and

general views on teaching and their role as a teacher. A deviation can in addition occur when bringing up an element in their answer regarding the given subcategory which does not align compared to most meanings and answers expressed in that subcategory by all interviewees. Differences are colour highlighted in red and the category, teachers' usage of online sources as classroom resource and amount of focus on online source criticism, with the included subcategories, is exemplified in the table on the preceding page.

Teachers' Usage of Online Sources as Classroom Resource and Amount of Focus on Online Source Criticism

Table 1.

Usage of online sources in their teaching	Transcription A (Sander) To a very high extent. As a result of LK06 and now especially with	Transcription B (Kirsten) To a very high extent with how the classrooms have become.	Transcription C (Charlotte) To a very high extent. Definitely more than textbooks.	Transcription D (Arne) To a pretty high extent. Depends on topic.
Usage of online sources compared to focus on source criticism in their teaching	Equivalent amount of focus.	Source criticism as natural and integrated part of teaching. Worked with systematically and constantly. Never put away.	Equivalent amount of focus. Source criticism as natural and integrated part of teaching. Less at the vocational studies because of the nature of English there.	Tries to the best of the teacher's ability. Has changed drastically compared to the start of the career.
Students expressing need for guidance in being source critical	Students do not express wanting help themselves. Takes what they find on the internet for granted as true. A process that the teacher feels they are getting better at.	Hard for them to know what needs to be sourced. Impression that students do not know how to reference and use sources correctly when starting VG1. Take it for granted what they find as true. Students aware of it and find it interesting to work with.	Seems as if they are taking what they find on the internet for granted as being true. When entering VG1 questionable sources are being used. Lack the critical eye, even though does not feel this is anything new for them.	Heard about the issue of being source critical but does not necessarily mean that they are being critical. Very individual in students expressing wanting help. Should not be anything new to 16-year-olds, because internet used all their years at school. Depends on the source if they are taking the information for granted as true and is about perspective.

As mentioned, Table 1. presents how I organized and analysed my empirical material through one of the categories and further subcategories. By creating this category, and the added three subcategories, the analytic process became clearer, and it helped in making sense of my material and identify similarities and differences in answers.

# 3.4 Validity and Reliability

Traditionally through various types of research, including within pedagogy and teaching, the terms validity and reliability have been applied. The first term regarding validity is meant to illustrate what type of conclusion the researcher has sound footing in presenting, and the reliability is meant to illustrate to what extent the findings the researcher has produced through the project is to be trusted. This can involve questions regarding if the researcher has conducted the research well, if what has been said in the interviews can be trusted, and if the researcher has covered all of information that is of importance for the project (Postholm & Jacobsen, 2018). Within the traditional perspectives in research, reliability has been defined as the consistency of the research's results, and thereby if these results can be reproduced by other researchers at a different time (Kvale & Brinkmann, 2015). Otherwise named, the "test and retest-method", has been considered the ultimate test for a research's reliability (Postholm & Jacobsen, 2018, p. 223).

When considering my own qualitative research, I do not find the reliability to be as crucial for measuring the quality of my findings. The reasoning behind this is that I would argue that due to the focus on the life world of four interviewed teachers, where I am using myself as a data collecting instrument, the chances are minimal of another researcher collecting the exact same answers as I did when interviewing four different upper secondary school English teachers at a different time. Regardless, that is not the intention behind my research. A qualitative study such as my own, will be difficult to replicate both because of the interaction between researcher and the field of research and the people participating in the research. These elements may occur differently as other researchers bring their own subjective and individual theory into their work, and because all people are ever-changing and developing, both researchers and the research participants (Postholm & Jacobsen, 2018). The validity of this study would be a more suitable criteria because it concerns if this study has given an answer to what it seeks to find out, and if I as a researcher have measured what I was meant to measure. Measuring in qualitative research is different from measuring in quantitative research, where the analysis of qualitative data involves creating descriptions and meaning out from the empirical material. Qualitative research cannot be measured in the same way as in quantitative researching, however, the validity concerns to what extent there is a correlation between the reality I claim to have studied and analysed, and the terms and theories used to describe this reality. Regarding the validity within qualitative research, it is pivotal that I ask myself the question of how well my chosen terms represent the reality of my empirical material (Postholm & Jacobsen, 2018, p. 229). In my opinion I believe that individual interviews as I conducted them, at each teacher's school in comfortable and known surroundings, is a credible way of getting insight into their life worlds, and that the chosen terms represent what was answered in the interviews. The most significant doubt in my mind would be that I do not know for sure if their descriptions and answers are exactly true as they were told, because they could be answering and describing situations in a more positive light than how the real-life situation really is. This is a weakness of my research, that I have not provided additional methods to support and challenge the data I have collected from my interviews, which decreases the overall validity.

#### 3.5 Ethical Considerations

Modern research ethics includes the basic human perspective from Immanuel Kant, where one cannot hurt anyone, or have ill will towards anyone, but practical and ethical

balance is to a greater extent submitted to what is called logical consequence. This approach assumes that one as a researcher is always considering the rewards achieved, up against the problems the participants can experience. Further, the starting point for research ethics in Norway today has its origin from three basic requirements connected to the relationship between the researcher and those who are being researched. These are informed consent, privacy requirements, and the requirement of being correctly portrayed (Postholm & Jacobsen, 2018, p. 247). Regarding the informed consent of my research, I received permission for my project by applying through NSD, the Norwegian Centre for Research Data, by filling out a form describing what my project entailed. I got permission to proceed with my research from NSD after a short while, and that could be because I do not handle any significant amount of personal information, or any personidentifying methods other than of a voice recorder. The only personal information in my research would be their recorded voices, but these are ultimately deleted entirely, and the questions in my interview guide are not requiring any person identifying answers. Each participant was sent the consent form NSD where they could read every detail and were informed that they could at any time withdraw from my project, even after agreeing initially. Just as important is the privacy requirements, and that the interview participants are informed of how sensitive the questions presented to them are and the overall information of what type of questions may occur, so they are not caught off guard in any sense.

According to Postholm and Jacobsen (2018, p. 249), there are three elements concerning the privacy requirements. It revolves around as mentioned how sensitive the retrieved information will be of them, how private the gathered information is going to be and thus the more serious measures will be considered in the research, and lastly, how great of a possibility is there that the information gathered from the interviews can identify the involved individuals. Concerning these privacy requirements for my research, it was not demanding of the participants. The questions involved experiences and personal opinions strictly classroom- and teaching-related and cannot identify the participants purely from what was said in the interviews. However, the risk is greater in general when working with a small number of participants in a qualitative study, where it is almost impossible to completely hide which person said what in the answers (Postholm & Jacobsen, 2018). I chose to give each interview participant pseudonyms, and the only personal information that stayed true was the number of years they have worked as a teacher, which I did not consider as a threat towards their privacy requirements. As for the requirement of being correctly portrayed, I believe I have not included any information that may put any of the participants in a bad light, or any information that may be of harm to them. It is not ethically justifiable to put participants who have voluntarily taken their time to agree to an interview in a bad light, in the way that it may be portrayed as harmful towards them (Rubin & Rubin, 2005). This would mean that if I considered any of my findings or received information as such, those findings would have to be with-held, because it would be unethical to present them (Postholm & Jacobsen, 2018). This correlates with the ethical principle of Fontana and Frey (2000), which indicates that the researcher's responsibility to the research's participants surpasses the study's objectives. Finally, all analysis of data material will usually result in a reduction of details and diversity. Therefore, a complete reproduction is never achievable, but is something that I as a researcher have strived towards. What needs to be done is to present data in a complete manner where I think it is essential to understand a finding and avoid using a finding that is taken out of context to argument for something the participant did not originally intend (Postholm & Jacobsen, 2018). In my analysis I feel that by condensing meaning and

creating categories helped in justifying how I finally chose to present my findings, where each of the answers are put in named categories and further subcategories. Their answers reflect the categories and subcategories that they are placed in, and none of the answers are placed in non-correlating categories or subcategories with the intention of presenting my findings falsely and in a better light.

# 3.6 My Role as a Researcher

According to Creswell (2009), qualitative researchers are aware of that their own background shapes their interpretation and are influenced by their experiences, both personal, cultural, and historical. The purpose, however, is to try and interpret what other people describe and say about their life world. Another known phenomenon in the interview situation is that participants may adapt what they say, towards what they think that I as an interviewer want to hear. There are several different conditions that may contribute to this such as gender, age, clothing, voice, and the different participants may experience these features differently. Trying to control all these possible features is impossible and is not something you should try and reach total control of either (Postholm & Jacobsen, 2018). Moreover, studies that explore a teacher's educational activities, such as the research of my own, may be perceived by the interviewed teacher as critical evaluation or control (Postholm & Jacobsen, 2018, p.226). As a researcher I need to be clear and open about how I experienced the interviews. Three out of four interview participants were people that I did not know from before at all, except from Charlotte, who I have known for most of my life. I feel that there may be two different ways that her answers could have been influenced by this. She may have been more relaxed during the interview because she feels more comfortable around me by knowing me from before, therefore her quard is down and could result in more honest answers. It also could have been affected in the opposite direction, where she may have felt that she needed to provide answers that are exaggerated positively, because she does not want to put herself in a light that makes her look bad. Overall, I think that every participant reflected well and provided meaningful answers, and that I felt in each interview that they gave honest answers. However, it is important to emphasize that I as a researcher cannot be completely sure of this depending on this interview method alone.

# **Chapter 4: Findings**

#### 4.1 Introduction

This chapter presents this thesis' main findings from the four semi-structured interviews. Each category found from the data analysis will be presented in their respective sections, and the subcategories presented further within them. I have created pseudonyms for the four interview participants for the sake of anonymity, and they have been named Sander, Kirsten, Charlotte, and Arne. The participants' teacher experiences are different in the number of years they have been in the teacher profession; however, they have all taught English at the upper secondary school level for most of their teaching years. Sander has worked for 17 years as a teacher, Kirsten is a native English speaker who has taught for 21 years, Charlotte has four years as a teacher, and finally, Arne has been a teacher for 18 years. The participants are of different ages, and this in mind could in some instances have been decisive regarding their answers, but that would be nothing more than speculation from me as a researcher and will not be handled as an important element towards my findings. There were no questions asked in the interviews that were directly age-related or related to years of experience, therefore, I find no reason to define their given answers in ways other from what was literally uttered in their answers. The findings are presented through similarities and differences in the participants' answer.

# 4.2 Findings From Interviews

The findings from the four interviews will be presented based on the eight categories, and their subcategories, created in the process of analysing the teachers' answers (Table 1.-8.). Utterances by the participants if presented are my own translations from Norwegian to English where I have tried to the best of my ability to be as true to the original answers as possible. Except for Kirsten, who was a native English speaker, where the original material from the transcription was in English from the very beginning and untouched through any translation process.

#### 4.3 LK20 - the New Curriculum

The interview started off with initial greetings and warm-up questions regarding the participants' age and years of experience as a teacher. The subcategories for the first category LK20, the new curriculum, is the general studies programme (GSP) versus the vocational study programme, where if mentioned the teacher describes how they view working with online source criticism in the vocational study programme EFL-classroom versus the GSP EFL-classroom. Motivation which involves how each teacher feels motivated to work with online source criticism through the new curriculum, and the subcategory current focus, which involves how and why they feel their current focus is influenced by the new curriculum.

# 4.3.1 The general studies programme versus the vocational study programme

This subcategory addresses the participants' views on working with online source criticism in the vocational EFL-classroom versus the GSP EFL-classroom. Every teacher had similar answers when touching on this subcategory, except for Arne who did not mention this at all. Within the first subcategory of the GSP versus the vocational study programme, was that the English subject in the vocational programme may require more attention from the teacher. It was said that this is because of there being less opportunities for continued work with online source criticism in this programme, and that

the English subject has a "more practical approach". Charlotte, who mentioned it as a more practical approach in this programme, justified this with the vocational study programme having a strong emphasis on using the English language to a great extent, because of the students quickly starting their jobs after two years in high school, compared to students in the GSP programme who go three years of upper secondary school often followed by several more years at university. Additionally, the jobs students in the vocational programme go into are often influenced by English-speaking colleagues and colleagues from other countries. Therefore, it may be considered more important for them to focus more on practicing the English language, than of practicing online source criticism and critical thinking. However, Charlotte who teaches at both programmes, underlined that she would like to have online source criticism more included in the vocational as well. As for another similarity, the competence aims were mentioned as more suiting for the GSP, with the possibility of continuation with English 1 and 2. The only difference in answers within this subcategory was as mentioned that Charlotte said that the vocational programme could benefit from a greater focus on online source criticism as well, even if the competence aims or the nature of English within that programme is more practical and job oriented, and not college oriented to the same degree as the GSP.

#### 4.3.2 Motivation

The next subcategory conveys how the new curriculum functions as a motivational element giving the teachers an extra incentive to focus on online source usage and online source criticism in the English upper secondary school subject. Again, three participants had similar answers, apart from Arne. They feel that they are to a very high extent motivated by the new curriculum because they feel it aids them, and especially gives clear motivation from the competence aims for VG1, English 1 and 2. The difference here was Arne, who expressed the greatest element for motivation by the new curriculum was the new textbooks. Arne clarified this with the tasks in the new textbooks are now encouraging more to use online sources than before, and that the tasks encourage research and usage of online sources to a greater extent.

#### 4.3.3 Current focus

For the third and last subcategory, current focus, it addresses how all four teachers reflect upon how the new curriculum influences their focus on working with online source criticism. The four teachers expressed that they feel they possess an adequate, and sufficient, amount of focus. They describe further that this focus has been influenced by the competence aims in the new curriculum, that there are not too many of them as they stand now, and that it helps with clear competence aims dedicated to looking at, analysing, and critical thinking of sources. The only remarkable difference found in these answers was from an element that Arne apart from the others mentioned, which was how he expressed viewing a great focus towards source criticism and using online sources because of it being part of the digital basic skill.

# 4.4 Experiences in Using Online Sources and Source Criticism as Part of Their Teaching

The subcategories within this category are the teachers' usage of online sources as classroom resource, focus on being critical of online sources in their teaching, usage of online sources versus the amount of focus on source criticism, and whether they have experienced their students expressing a need for guidance in being source critical.

### 4.4.1 Usage of online sources as classroom resource

This subcategory addresses how the interviewed teachers describe their usage of online sources as classroom resource. The similarities illustrated that every teacher said they use online sources to a very high extent, apart from Arne, who said his teaching was influenced to a pretty high extent by using online sources, rather than to a very high extent such as the others. Sander justified his highly present usage of online sources as a result of LK06, the previous curriculum, and especially now with the arrival of the new curriculum LK20. Kirsten mentioned that her usage of online sources has become very much present because of how today's classrooms has become, and Charlotte did not explain her answer further, other than of using online sources definitely more than textbooks. Arne said that his use of online sources was to a pretty high extent and was topic dependent. The similarities found within this subcategory are that every teacher said they use online sources in their teaching to a high extent, but with differences in justifications, with Sander mentioning the new curriculum, Kirsten the digitalization of today's classrooms, Charlotte did not go into more detailed reason other than using online sources far more than textbooks. Arne said that his use was topic dependent.

# 4.4.2 Usage of online sources compared to focus on source criticism in their teaching

The next subcategory revolves around their usage of online sources versus their amount of focus on source criticism in their teaching. The similarities in answers were that Sander, Kirsten, and Charlotte, felt that their focus on using online sources was equivalent to their focus on source criticism. For Kirsten and Charlotte, they expressed that they feel it as a natural and integrated part of their teaching, and that it is worked with constantly. The differences in their responses are that Charlotte felt that she had a lesser focus at the vocational studies, because the classroom activities are more practically influenced and aims to prepare students to use the English language when starting their jobs after their two years at high school. Charlotte was the only one who mentioned the vocational programme. Arne had a different answer altogether compared to the other three, where he said that he tries to the best of his ability, and that this has changed drastically compared to the start of his career.

# 4.4.3 Students not expressing a need for guidance in being critical towards online sources

This subcategory addresses if the teachers interviewed have experienced their students expressing a need for guidance in being critical of online sources. Here it was discovered several similarities in their responses. The first similarity found across all teachers' answers, was that they have the impression of their students taking what they find online for granted as true. However, Sander feels that this is something his students are getting better at, and Kirsten feels this may be because they find it hard to know how to use sources correctly when starting VG1. Her students are however aware of this and find it interesting to work with. The same is mentioned by Charlotte, who has experienced that when her students enter VG1 there are questionable sources being used, and that students lack the critical eye, even though she feels that this is nothing that is new to them. Arne has a similar experience regarding his students as well. He said that the students have heard about the issue of being source critical, but that it does not necessarily mean that they are in fact being critical. The significant difference found in the teachers' answers was from Arne. He mentioned that he has experienced this to be very individual in students expressing wanting help, and that being critical towards online sources should not be anything new to 16-year-olds, because they have been using the

internet through all their years at school. Additionally, he said that it depends on the source if they are taking the information for granted as true and that it is about perspective. Arne mentioning that it depends on the source and that it is about perspective was further clarified by comparing different type of online sources. For example, students would be more likely to take information from a well-known source in media. That could both be a website or what a well-known person has said, for granted as true, compared to not considering smaller, lesser-known sources, because they are not exposed to them, or familiar with them to the same degree, therefore do not trust them or view them equally.

# 4.5 Online Sources and Source Criticism as Part of the Upper Secondary School English Subject

The subcategories within this category are how the interviewed teachers view online sources and source criticism as part of the English subject, and the second and last subcategory is how they view this compared to other areas of the English subject.

## 4.5.1 Online source criticism as part of the English subject

This subcategory addresses how the interviewed teachers consider online source criticism as part of the English upper secondary school subject. All four teachers answered that they feel online source criticism as a natural part of the English subject as it is now. Sander elaborated on why he views online source criticism as an essential part, because we are exposed to English everywhere in life all the time, and therefore the need for critical thinking is a very important competence aim. Furthermore, that the English subject has evolved from only being language, to culture and information as well. Kirsten feels online source criticism is an essential part as well, and that this is an important topic today, and that the students have found the topic interesting. She emphasises further that her teaching has a need for implementing online source criticism. There is another similarity in Kirsten's, Charlotte's, and Arne's answers, and that is the focus on online source criticism is task dependent. That this topic appears as natural in societal topics and longer writing tasks. Arne again mentions the new textbooks, and how for example tasks in the exams are now including the topic of fake news. As the clearest difference mentioned here, was Arne mentioning how working with online source criticism and to what extent, can depend on the teacher, and if it correlates with what is being worked on in the classroom.

# 4.5.2 Working with online source criticism compared to other areas of the EFL-subject

The next subcategory addresses how the four teachers consider working with online sources and online source criticism compared to other areas of the English subject. A similarity here was that Sander, Charlotte, and Arne, all answered that online source criticism is an area worth focusing on. Sander sees online source criticism as part of the English subject as worth it because the students are not only formed through education, but the entirety of their lives, and that this helps to create a foundation in students' ability to be critical citizens. Similarly, Charlotte considers that the focus on online source criticism should be equated compared to other areas of the English subject and sees it as relevant throughout the whole year within certain topics and subjects and is never put away. Arne, however, resembles Sander in his answer, mentioning how online source criticism as part of the English subject is a necessary and important part of shaping future citizens. Additionally, similarly to Charlotte's answer, how online source criticism is relevant to include within most societal parts of the English subject. The notable

difference here was in Kirsten's answer, who saw the benefits of online source criticism compared to other areas in the English subject being college-oriented but expressed that she does not want to include it at the expense of other areas. Online source criticism is college oriented and most suitable to focus on compared to other areas in the English subject for this reason, and feels that a topic such as online source criticism stands more in the way of the playfulness of the English subject.

# 4.6 The Use of Online Sources Compared to the Textbook as Teaching Tool

This category presents the teachers' views on using online sources compared to the textbook, and the two subcategories address the benefits and challenges of using online sources compared to the use of textbooks.

# 4.6.1 Benefits of using online sources

This subcategory presents how each teacher view the benefits of using online sources over textbooks. The similarities found in the answers are how online sources are dynamic, and the textbook is static. The consensus here across all answers regarding the benefits are that online sources help with visualization and that students use more of their senses and are more engaged, whereas the textbook is a good starting point but gets old fast and is more limited. Other similarities found were the lack of interesting and engaging things that can catch the students' attention in the textbook, and that the teachers feel the need for online sources to keep up with current affairs. Charlotte and Arne both answer that the new textbooks seem more promising because they encourage more use of online sources, however, Charlotte thinks that because the students have been working with the textbook for ten years prior to VG1, it may affect their motivation with working with the textbook negatively.

# 4.6.2 Challenges of using online sources

Addressed within this subcategory, are the challenges the teachers see in connection to using online sources over the textbook. Regarding the type of challenges the teachers responded with in using online sources over the textbook, there are three unique and different answers. Sander answered that the digital aspect can simply become too much for some students, because the students today are so exposed to the digital world both at school and in their free time. He even mentioned a situation where a student wanted to sit in peace and quiet and read about what they were working with on paper, instead of sitting at the computer. Kirsten sees the challenge of students having grown up with everything being online and the information is so immediate and accessible. She believes this is a challenge and therefore it has become so important to teach students about being critical. Charlotte, however, sees the greatest challenge in using online sources in the classroom as the lack of academic sources available at high school, and she admitted to having to use scholarly articles and resources she was using when she was a student herself. Arne did not mention any challenges in this part of the interview.

### 4.7 Importance of Developing Critical Thinking Students

The category regarding the importance of developing critical thinking students, include four subcategories, which was the highest number of subcategories created throughout the analytic process and was needed in narrowing all the material down. The subcategories involve the teachers' attitudes towards Wikipedia, how they view the importance of developing critical thinking students regarding their everyday context, how and if they believe this is important for their students' future higher education and work context, and lastly, if they believe this can function as foundation for further discussion in their students' lives.

#### 4.7.1 Attitudes towards Wikipedia

Concerning the teachers' attitudes towards Wikipedia, Sander and Kirsten were similar in their answers in being critical towards Wikipedia. Further, Sander answered that Wikipedia is a bad habit for the students, and that they need to have a wider view on their search results, and to be more critical and sceptical. Kirsten answered similarly that they are allowed to use it, however, it weakens the students' arguments. She said further that Wikipedia is much easier to use for the students, because being critical and doing more research is more time demanding for them. Charlotte and Arne had a bit different view on Wikipedia. Charlotte said that Wikipedia is a bit more accepted now than before and mentioned that both her as a teacher and her students have used Wikipedia as a source. Arne had a similar opinion, where he expressed that it may be accepted to use Wikipedia now, because there are so many who checks and edits the pages. He continued with saying that his students are aware of Wikipedia being viewed as nonreliable, but he thinks this is a thought of the past. In summation, Sander and Kirsten were critical to the usage of Wikipedia in the classroom, whereas Charlotte and Arne have a more accepted view on it and gave the impression of using it themselves. This signals that there are still conflicting views on the usage of Wikipedia today and is individual from teacher to teacher.

#### 4.7.2 In the everyday context

Next, within the category of the importance of developing critical thinking students, is the subcategory that involves how important this category is regarding the everyday context of their students' lives. All four teachers were similar in their answers expressing that this is necessary and relevant. Sander believes this is important because students today are exposed to English everywhere in life as the lingua franca, and that there is a need for critical thinking. Further, he described the everyday lives of students to be highly relevant today because of the amount of information we are exposed to, and as a teacher the importance of forming them more critical towards all this information as future citizens. Kirsten also sees this as necessary because of the digitalization of everything, and that students now need to be media literate and aware of where they get their information. Kirsten described further that she feels her students are aware of fake news and can be critical, however, they can be easily influenced by both other students and the media in what they choose to believe. Charlotte had a similar answer as well who sees shaping her students as critical thinking citizens, as necessary because of the digitalization of classrooms and in her students' daily lives. She expressed students today need to be critical of the sources they encounter, and avoid subjective information, and that it is easy for them to fall into echo chambers. Arne answered that he sees the everyday lives of the students as the most important aspect within having a focus on developing critical thinking students in the English subject. He said that being critical towards the massive flow of information one is exposed to, both the younger and older people, has become an educational mission. He emphasised it as especially important with how digitalized society now has become with its massive flow of information. Arne feels this has become a responsibility both as an adult and as a teacher. An additional similarity here was the connection Kirsten and Arne made towards working with the topic of the United States in the classroom bringing an extra dimension to why this is relevant for the English subject. Kirsten mentioned the repercussions of misinformation in the United States with former President Trump as an element that sparked the importance of being critical in the students' everyday context, and Arne similarly believed this was especially important for the English subject, because of how exposed students are to what is happening in the United States. Arne even elaborated with a more personal

experience. He mentioned how he has experienced his own children not being critical and quick to define what they experience as truth. He believed the reason for this was because they are being exposed solely to only one side of something, indicating the issue of exposure to only subjective information.

#### 4.7.3 The higher education and work context

The third subcategory addresses how the four teachers see the higher education and work context as part of the importance of developing critical thinking students. Arne did not mention this context in his interview, however, the other three participants had similar answers where they saw this as important and beneficial. Sander mentioned that he thought it is important for both higher education and in the students' future careers. His reasoning behind this was because when the students become working citizens, they need the ability to be critical towards what they may be exposed to of sources of varying reliabilities. Kirsten mentioned seeing the benefits of this being college oriented, and Charlotte saw this as very important as well. The difference in answers here was how Charlotte elaborated the higher education and work context comparing the GSP to the vocational studies programme. She said that this aspect is less focused on in the vocational, however, that they could benefit from a greater focus on online source criticism there as well. This illustrates the difference in the nature of the English subject, where the GSP is more college oriented, therefore having a greater focus on this. Charlotte did however emphasise that she believed that an equivalent amount of focus on online source criticism for both programmes within the English subject could be viewed as beneficial, in developing critical thinking students.

### 4.7.4 Functioning as foundation for further discussion

Lastly, this subcategory revolves around how the importance of developing critical thinking students in the English subject may function as a foundation for further discussion in the students' lives. The similarities here are that Sander, Kirsten, and Charlotte, absolutely saw the potential of this functioning as foundation for further discussion in their students' lives. Sander mentioned this being important regarding the general etiquette of the students, and that they are observant of everything that influences them. He elaborated on focusing on developing critical students in the classroom, and having that as foundation for further discussion, will have a strong transfer value in the students' daily lives. Kirsten saw this as absolutely functioning as foundation for further discussion, regarding the day-to-day bombardment of information that students encounter. She emphasised further the importance of this when living in a democratic society and sees it as essential to be digitally and media literate. Charlotte saw the development of critical thinking students functioning as a foundation for further discussion as well, and she believes that her students take the critical thinking from working with online source criticism with them. She mentioned that it would be best if a student was asked if that student feels that focusing on online source criticism in the classroom facilitates for a further discussion in their lives regarding critical thinking towards online sources. However, her impression was that she believes that her students take this discussion and the work with online source criticism with them in their daily lives. Arne had a different answer, while being as hopeful as the others and positive to this functioning as a foundation for further discussion, he was more sceptical. He said that he surely hopes it does and emphasised as well the importance of shaping critical students towards the massive flow of information. He describes seeing it as a goal to shape students as critical, so they avoid accepting everything they encounter as true.

# 4.8 The Professional Digital Competence Framework for Teachers

This category was given two subcategories, concentrating on how having an adequate focus on online source criticism can be time demanding of teachers today, and the subcategory of how each teacher reflected upon their own focus with this in their classrooms. The professional digital competence framework for teachers was not explicitly mentioned through a question in the interviews, and it was not the intent of portraying any of the participants as less digitally competent than the other. The intent behind this category was to try and find out how the elements within the framework regarding online source criticism as part of being a digitally competent teacher today, is reflected upon with reflections from the classroom. A theory versus practice juxtaposition is the category's aim to illustrate. How the goal of this framework can be juxtaposed to how teachers experience working with and prioritizing online source criticism in the reality of the classroom.

#### 4.8.1 Time consuming of the teacher

This subcategory addresses how focusing on online source criticism can be time consuming of the teacher. Sander, Kirsten, and Arne had similar answers where they expressed having a good focus on this can be time consuming. Sander has experienced that it is time consuming as a teacher because this is something that besides working with online source criticism in the classroom, is in addition worked with through subject teams in cooperating with colleagues. Sander mentioned further that it can be time consuming because as a teacher this is something one needs to be aware of all the time, to secure the reliability with what is worked with in class. Kirsten had a similar reflection where she said that she finds it difficult to devote as much time as she wants to this at VG1. Arne found this to be time consuming because of there being so much available online, and that it takes time to sort out what online sources are relevant and good enough to use in class. He emphasised further that he always hopes to find good and reliable sources when working with his students, but he does not feel that there is a guarantee that he always will be able to. Arne extended his response with him experiencing using enough time on online source criticism as a responsibility, and that he tries to the best of his ability to take it seriously. Charlotte reflected upon this in a different way. She said that she believes that focusing sufficiently on online sources and online source criticism in today's classrooms is a competence that many teachers think about, however, there is a great amount of freedom related to how one chooses to approach it. She further emphasised that it is dependent on each teacher, but that she has thought of this as always being important in her teaching.

#### 4.8.2 Reflections on having a sufficient focus on online source criticism

The following subcategory was sought to capture each participant's reflections on their own focus on the topic of online source criticism in the English subject, and not every teacher interviewed touched on this aspect. Sander, Charlotte, and Arne, however, had something to say on the matter, and their answers were quite different in content. Sander said that he felt that his focus surrounding this needs to be worked with further, not only for a couple of weeks or school lessons, but continuously throughout the year. Charlotte, on the other hand, thinks that her focus is good, and plans to maintain it that way. She said further that this focus can typically be discussed in network meetings with all the other English teachers in the county. Charlotte mentioned as well that she does not feel that her focus personally has been affected by the shift from the old curriculum LK06 to the new curriculum LK20. Arne gave an answer more similar to Sander's, where he feels there is room for personal improvement, and that he feels it is important to be

aware of this focus. Additionally, he mentioned that his focus has changed drastically compared to the start of his teaching career, which was a personal reflection different from the others.

### 4.9 Interdisciplinary Attention

The category named interdisciplinary attention does not contain further subcategories. This category was of aid in finding how each teacher within their answers believes the topic of online source criticism in the English subject can function interdisciplinary as well. Initially, the findings through this category made it apparent that each teacher interviewed believes that the topic of online source criticism is interdisciplinary. Sander mentioned that the interdisciplinary focus feels natural and creates a good opportunity to show students differences between reliable sources and alternative facts. Sander emphasised that the focus on online source criticism is part of the three-part interdisciplinary topics and has a strong connection towards the common objectives in the new curriculum. Critical source usage was in addition one of the points they worked with in interdisciplinary teams, and the teachers help each other in this direction. Kirsten answered that she thinks it functions well when working interdisciplinary, and that it feels as essential to include online source criticism. Similarly, to Sander, she thinks it functions well with science and social studies, working with sustainable development, climate deniers, vaccine conspiracies and conspiracies in general. Charlotte had similar opinions, where she finds it interdisciplinary and natural to implement within subjects such as Norwegian, geography, and science, focusing on cancel culture and conspiracy theories. Arne follows up on this with the example of working in an interdisciplinary way with the social studies teacher for example, with the topic of global issues. He said further that he feels this is a common responsibility across every subject. Charlotte had the most distinct difference in her answers, where she said that an interdisciplinary focus would be most suiting at VG1. She said this was because of students having many of the same subjects in their classes, which makes it easier to cooperate. And similarly, to Arne, she also mentioned cooperating with for example the social studies teacher where they agree on online sources to be used, and demand source criticism thereafter.

# 4.10 Task Dependent

This last category is named task dependent and was created to find out if the teachers interviewed thought of focusing on online source criticism as task dependent, and if so, most typically through which types of tasks it is implemented. The two subcategories used for this category are the type of tasks, and type of topics, typically worked with when implementing a focus on online source criticism in the upper secondary English subject.

#### 4.10.1 Type of tasks

The consensus across every teacher's response is that they believe working with online source criticism is task dependent. However, smaller tasks that do not require much preparation are not included, in tasks where students are not using online sources. This may be tasks not requiring the students of retrieving and using information online. Concrete tasks requiring usage of online sources were said to require an important focus from the teacher and the teacher needs to illustrate differences between reliable sources and alternative facts. Through both writing tasks and project work where they gather their information online. Many of the tasks Kirsten mentions are writing and speaking tasks, where they involve having an opinion, giving examples of point of views, which her students then need to support with a source. Kirsten elaborated by saying that she wants

students' reflections to occur organically in class when she, for example, asks her students during? discussions. She gave an example of a task where the competence aim is achieved through looking at a news story from different websites with a credibility check list, looking at objectivity and precision in language. Charlotte expressed a difference in answer, who expressed using online sources with her students for everything but believed it as well was task dependent. Another peculiar element mentioned apart from the other teachers, was Arne who underlined the difference if students are reading information about something or someone, and then feels it is less likely that the source used is not reliable. Arne meant that when retrieving and using information about for example France, or Nelson Mandela, it would be less of a risk of that information being non-trustworthy. As opposed to more controversial and current affairs more prone to misinformation and fake news.

#### 4.10.2 Topic relevance

This subcategory entails how working with online source criticism in the classroom may benefit from working with certain topics. Apart from Sander who did not mention anything of the relevance of certain topics in his answers, there was a consensus across the other three teachers that they find working with online source criticism as the most natural within certain topics within the English subject. Kirsten, Charlotte, and Arne mentioned the topics of social media, fake news, types of misinformation and disinformation, and both types of news articles of events with several sides to the same issue, and even professional articles. Furthermore, the topics of politics, climate change, and as Kirsten put it, certain topics where it feels the most organic. Two of the participants gave a more descriptive answer of relevant topics. Kirsten mentioned that when working with the topic of racism in the United States, where a need for objectivity, credibility, and precision in language is necessary to consider, and is therefore viewed as a good example of a relevant topic. Another specified example of a topic was answered by Charlotte. She brought forward an example of working with the topic of Brexit, and the context between Brexit and immigration and feelings towards immigration. These more precise examples given are sensitive topics that should be handled carefully and the focus on being critical towards encountering online sources surrounding them is crucial.

# 4.11 Summary of Findings

This chapter presents the answers gathered from within each of the eight categories from the four individual interviews. The findings address a diverse and plentiful collection of answers, and it touches on numerous topics within each of the categories. These findings create a wide illustration of the participants' teaching, reflections, and knowledge, of perceiving and prioritizing working with online source criticism in the upper secondary EFL-classroom. For the next chapter, these findings will be further condensed into main findings, and discussed in light of previous research, the Professional Digital Competence Framework for Teachers, and in conjunction with the concepts of critical digital literacy and civic online reasoning.

# **Chapter 5: Discussion**

#### 5.1 Introduction

The findings presented in the previous chapter will function as a foundation for the further discussion and reflections trying to answer my research question: *How do Norwegian EFL upper secondary school teachers perceive and prioritize working with online sources and their varying reliabilities?* My findings through the data collectionmethod of interviews which I organized through eight categories and further subcategories, will be discussed through previous research, and in conjunction with the concepts of critical digital literacy and civic online reasoning.

### 5.2 Main Findings

The discussion is organized by each discovered topic having their own parts to discuss my research question in light of my main findings. My main findings retrieved from the interviews have given me insight into how four Norwegian EFL upper secondary school teachers perceive and prioritize working with online sources and their varying reliabilities. These findings may provide answers to how teaching online source criticism as part of the English subject in the upper secondary school, can be of great benefit to the students. It can be challenging and time demanding for the teacher, however as the findings illustrate, it is considered as important for teachers to prioritize. For the discussion, I have included the findings I found as the most significant, interesting, and distinct in similarity or difference in answer.

### 5.2.1 The impact of the new curriculum and the two study programmes

Each teacher responded that the new curriculum has given them an extra motivation and incentive to work with online source criticism to a greater extent now than before. Three of the teachers referred to the curriculum itself with its competence aims, and the fourth responded with the new textbooks being a strong motivation. With the report from the European Commission (2018), it became apparent that the issue of disinformation in the form of fake news, propaganda, and manipulation as a global phenomenon was to be considered a threat to our democratic societies and an intensifier of polarization. This phenomenon is nothing new, however, the multiple ways this misinformation can spread and ramify our societies is now considered to be more profound and complex than ever (Steensen, 2019). As a preventive measure in fighting this threat, it has been clearly emphasized through the new curriculum that teaching criticism of online sources is an essential part of educating our students. Online source criticism is addressed and emphasised more clearly through competence aims within subjects, along with being part of the digital skills now categorised as one of the basic skills. This may argue how the new curriculum demands the teacher to prioritize this in their teaching more than before.

Referring to the findings of the comparison between the general studies programme (GSP) and the vocational study programme, the competence aims and classrooms within the GSP were more influenced by working with online source criticism, compared to the vocational study programme. The argument here was that the GSP is more college and higher education oriented, and the programme opens the opportunity for a continuation of the English subject with English 1 and 2. This gives more space and time for the teachers to focus on online source criticism with their students in the GSP. Interestingly, the teaching in the vocational study programme, was described as not as influenced to by an equal focus towards online source criticism. Charlotte, who was the one with

experience from both programmes, discussed one of the reasons why. She meant that the oral and written production of English, the more practical use of English as she named it, was the main priority in the vocational study programme. A more practical approach where the students in the vocational programme are mainly preparing themselves for the start of their working careers, that are typically influenced by Englishspeaking colleagues. Charlotte argued that she sees a greater focus on online source criticism to be beneficial for the vocational study programme as well compared to how she has experienced it. It is understandable that the vocational programme does not include the continuation of English 1 and 2, however as Charlotte said in her answer, the vocational programme would benefit from a greater focus on online source criticism regardless. Being critical towards online sources may benefit from being present in all classrooms, and even though this topic may be viewed as more college-oriented, it has now become of such importance that it should be considered life-oriented. It does not need to be emphasised to the exact same extent, but it is necessary for all students to act critical towards the massive flow of information that we are exposed to, and sources of varying reliabilities.

In one of the main findings from the report from The Norwegian Media Authority (2020), it became clear that 97 percent of 9–18-year-olds are in possession of their own mobile phone, and 70 percent of 9-18-year-olds own their own personal computer. On top of that, the report showed regarding source criticism and fake news, that two out of three 13–18-year-olds experienced news that they suspected to be untrue, and six out of ten of these 13-18-year-olds did not think of it as more than a suspicion. Moreover, 66 percent of 13-18-year-olds who had experienced news that they suspected to be false, originated and was exposed to them through social media (The Norwegian Media Authority, 2020). Because most students nowadays are in possession of their own mobile phone and personal computer, with access to the internet and the endless variations of English online sources of varying reliabilities wherever they may be, this has become an important topic in the new curriculum. To acknowledge this and then navigate our students through the topic of online source criticism, across different study programmes, should be of great importance. It is not only a basic skill and a competence to practice in the classrooms but being digitally literate and having a critical eye towards misinformation, is something everyone can benefit greatly from. The topic of online source criticism should not be considered mostly college-oriented, and therefore included to the same extent in the vocational study programme.

Previous research and reports show that the importance of being critical towards online sources should go beyond study programme and be emphasized for every teacher to develop future critical thinking citizens. Each student, regardless of study programme, is going to be participating citizens of society, and their ability to act critically towards all the available English online sources of varying reliability exposed to them now can be considered essential moving forward. As a teacher, Charlotte reflected upon this and responded with an awareness of online source criticism being equally important to focus on across these two study programmes. With the limited material gathered in this thesis, one can hope to think that there are teachers out there perceiving and prioritizing the need for online source criticism of equal importance as she underlines. With the new and stronger emphasis towards online source criticism in the new curriculum one could hope that such an approach and way of thinking is present by other teachers nationwide.

# 5.2.2 Teachers' usage of online sources and their observance of students' need for guidance

In my own research, every teacher interviewed answered that they use online sources in their teaching of the English subject to a great extent. The reasons behind this motivation were divided, where the new curriculum, the digitalization of the classroom, and the usage being topic dependent were justifications in their response. It became clear that similarly to Kristensen's study (2020), that the usage of online sources in their teaching was highly present but justified by different reasons other than the usage being less time-consuming and effective. In the results of the study carried out by Atle Kristensen (2020), it was found that every teacher that he interviewed had varying experience with technology in the classroom. However, they agreed that the use of technology in the classroom was especially efficient and less time-consuming for their work when searching for and using relevant information. The one most apparent benefit from using computers in the classroom from this study, was the effectiveness of using this technology to retrieve information online, and both the teachers and their students benefitted greatly from this (Kristensen, 2020). It became clear that similarly to Kristensen's study (2020), the usage of online sources in their teaching was highly present but justified by different reasons other than the usage being less time-consuming and effective. Both my own research and the study carried out by Kristensen, can be aligned with, and supported by the 2019 Monitor-report by SINTEF (Fjørtoft et al., 2019). The Monitor-report presented a descriptive mapping of the digital conditions in Norwegian schools and compared to the Monitor-report from 2013 and 2016, the 2019report addressed a greater usage of the computer than of the previous reports. More precisely within the upper secondary English subject at the VG2-level, it was reported that 76,4 percent of classroom activities were influenced using a computer. Furthermore, the activity of searching for and finding information on the internet was reported at 95,6 percent. This high percentage of using online sources that was reported match with the answers from both the teachers I interviewed and the ones from Kristensen's study (2020). From three different studies it can be indicated that the usage of online sources in the English subject is greatly present. Therefore, it should be a clear indication for discussion that online source criticism is a necessity to implement and have a strong focus towards in the upper secondary EFL-classroom.

The teachers I interviewed see the focus of online source criticism as an essential and integrated part of their teaching, a natural part of the English upper secondary school subject, relevant throughout the year, and that they are aware of this being an important issue, in developing their students' knowledge of online sources. The only difference was in Kirsten's answer, where she sees online source criticism as standing in the way of the subject's playfulness and should be treated mostly as college oriented. With the use of online sources being highly present in the upper secondary English classrooms, it became a reasonable continuation to find out whether if the teachers interviewed perceive their students of in need of aid in being critical towards the online sources that are frequently used and encountered. This made for an unnerving discovery from the teachers' perspectives. A clear similarity was that the teachers' impression of their students was that they possess the bad habit of taking what they find online for granted as being true, questionable sources are used, and that the students lack a critical eye. Even though the digital natives as defined by Prensky (2001), have been immersed in technology since the beginning of their lives where they may excel at switching between social media platforms, texting friends and uploading pictures, they are found to be lacking a scepticism and critical eye towards said technology and massive flow of information that

they encounter. As claimed by Pangrazio (2016), the success of young people both as students, engaged citizens, and future employees, is strongly connected to the critical digital literacy that our students hopefully develop. This trend discovered through my research regarding the lack of critical thinking towards online sources of upper secondary school students, those students in question may be in danger of being left behind in several aspects of their lives, from employment to social interaction (Pangrazio, 2016).

Developing the critical digital literacy of students in the form of knowledge and a critical eye towards online sources can be viewed as essential for several reasons and through different methods. Critical digital literacy in the form of online source criticism, is important to include in today's EFL upper secondary classrooms. To help secure students as active and engaged critical citizens, and not solely functioning as non-sceptical individuals exposed to the massive flow of information through various English online sources. As Pangrazio (2016) mentions, constructive use of digital technology requires ongoing analysis and interpretation, and through the English subject this can be an appropriate gateway. Critical digital literacy in the form of online source criticism in the EFL classroom, can then provide opportunities to examine broader issues associated with digital media use. For instance, by working with topics such as social class, race, fake news, and other controversial topics presented in the lingua franca, where students can examine different viewpoints and reliable versus non-reliable online sources to illustrate the problems of misinformation. Such act of criticism may begin with the individual, but in the classroom context there may be opportunities for collaboration not only through group reflection, but also concerns regarding social and educational inequalities. As Pangrazio (2016) puts it, such a collective approach used in the classroom can help to "speak back" to the more individualised practices that more typically characterise the use of digital technology. With the classroom as a platform, students can reflect upon and have critical discussion regarding both their daily use of technology, along with developing objectivism towards the massive flow of information and texts, fake news, that they are exposed to daily. Working with controversial topics may promote engagement and interest among students while in addition forming critical citizens. My findings indicated a strong connection between working with certain topics and online source criticism.

### 5.2.3 Task dependency and the role of the teacher

The findings from my research presented that each teacher interviewed sees working with online source criticism as task dependent through societal topics and longer writing tasks where the students retrieve and use information online. Furthermore, in support of controversial topics promoting engagement and interest, the response from the interviewed teachers emphasised the usage of online sources when having for example discussion tasks. The teachers described that their students often need to back up their arguments in these discussion tasks with a source, often working with controversial topics where they gather their information online. It was discovered through my findings that each teacher thought of using online sources as task dependent, and that giving the students the possibility to use the internet to find information helps with promoting engagement and language production.

The teachers interviewed gave examples of working with tasks involving topics such as fake news, politics, climate change, racism in the United States, and Brexit. I discovered through each teacher's response that they feel they have an adequate amount of focus on source criticism when including online sources, and that their classrooms benefit from it, and that it is indeed needed. However, this demands a strong focus from the teachers.

It was then a reassuring answer I gathered through my interviews that each teacher supports having a strong focus on online source criticism. My findings indicated that every teacher believes this is important, and that they believe they have a good focus. This is important because if students are to use the internet and its resources they need to be supported by a digitally competent and an aware teacher that implements online source criticism purposefully. This can be supported further by the research by McGrew (2020), where working with online sources combined with controversial topics, was found to improve students' critical thinking. It was found that the students' ability to evaluate online information improved on topics addressing controversial content such as minimal wage, nuclear radiation, and immigration. McGrew (2020) discussed further that when students are now turning to the internet in retrieving information of such topics, the civic health of our communities is decreased if our students struggle to distinguish between high-quality from unreliable content. When working with mentioned topics, and through other types of tasks where students use online sources, it can be seen as crucial that the teacher is able to include the topic of online source criticism and function as a navigator in guiding the students. Trying to balance working with online sources and having an equal focus on online source criticism, was described by the interviewed teachers to be an integrated part of the English upper secondary school subject, and a highly important competence aim. This was further explained to originate from the English subject evolving into more culture and information, and Kirsten described her students to find the topic of online source criticism as interesting.

By including online source criticism as part of teaching the English upper secondary school subject, it creates possibilities for learning but demands time and effort from the teacher. As Blikstad-Balas (2016b) points out from her research, the teacher can serve as a navigator. By using technology in the classroom resulting in a good learning environment where students may see the teacher as a technological role model, and then facilitate for the students' critical eye to be developed further. The students' ability to navigate themselves safely, with purpose, and simultaneously be critical towards the great number of potential sources they encounter, is key to succeed in finding and using sensible sources (Blikstad-Balas, 2016b, p.147). Additionally, the area within digital technology that is online source criticism will benefit schools, because the importance of being able to navigate safely and critically through the ever-expanding amount of text and information available on the internet, is an important topic that needs attention (Blikstad-Balas, 2016b). As mentioned, the teachers interviewed responded that their students sometimes are taking what they encounter on the internet for granted as true, but that they are gradually getting better with being more critical. Charlotte answered that she experiences her students when entering VG1 to be using questionable sources and that they lack a critical eye. She has experienced this even though she emphasised feeling that being critical towards online sources is nothing new for her students. This may indicate an ongoing process and issue where the continuation of work and focus on online source criticism is highly needed.

I found it to be surprising in my research that the teachers interviewed expressed their students lacking critical thought towards online sources when entering the upper secondary, since they have been working with a computer and online sources through most of their school years. It was an interesting discovery that the teachers interviewed were concerned, regarding their students' lack of training with online source criticism prior to arriving to the upper secondary. However, with the arrival of the new curriculum, it was shown through the interviewed teachers' answers that online source criticism is focused on more now than before and will hopefully create a positive trend in teaching

going forward. With digital skills being added as a basic skill, and online source criticism being emphasised more than before in the competence aims, one can hope that students will become more adjusted towards being more critical over time. It became clear from the responses from the interviewed teachers that their classrooms do need a focus on online source criticism and that they believe their students are benefitting from it. Moreover, the teachers' reasons for why they believe it is important to prioritize online source criticism to develop critical thinking students were numerous, and the benefits of such a focus were said to affect the students in several ways.

### 5.2.4 Importance of developing critical thinking students

Through my findings I discovered a similarity in answer across every teacher interviewed, of how they view working with online source criticism as transferable and essential for their students' everyday lives. I discovered in my interviews that all four teachers view the work with online source criticism in the English subject to be necessary and highly relevant regarding their students' everyday lives. Because of the digitalization of the classrooms and the world itself, it was emphasised that it is of great importance to form students as media and digitally literate as future critical thinking citizens. It was discovered further through the responses how the English subject is viewed as a well-suited platform to work on online source criticism to affect students' daily lives for the better, because of the focus the subject has for example on the United States. Sander emphasised that online source criticism is important in the English subject, because of English being the lingua franca, and that students are exposed to the language through various online sources and platforms everywhere in life. Followed by Kirsten, who described her students of being aware of fake news and that they can be critical but are easily influenced by their classmates and the media in what they choose to believe.

These responses can be connected to the concept of civic online reasoning, which is the ability to search for, evaluate, and verify online information related to social and political issues (Wineburg & McGrew, 2018). This concept may be important to acknowledge as teachers because it can be viewed as necessary in today's digital world for students to become aware of the social and political choices, we as citizens face. Civic online reasoning is viewed as a subset of the larger topics of digital and media literacy (Wineburg & McGrew, 2018). More precisely regarding my research, I found the element within civic online reasoning of searching for and evaluating social and political information, to connect with the emphasised focus on online source criticism in the new curriculum, as well as how the concept of critical digital literacy can be worked with in the upper secondary English subject through online source criticism. The prerequisite for responsible civic engagement in the twenty-first century is being able to sort fact from fiction online (Breakstone et, al. 2021). The questions in the interviews involving the importance of developing critical thinking students in the everyday context, made for the discovery of how each teacher responded with viewing this of great importance. To clarify, this question was to find out how the interviewed teachers perceive working with online source criticism, as essential to benefit not only students in the educational context, but otherwise in their lives as well. It was stated by Breakstone et al. (2021) that because of how massive the flow of digital information that is exposed to us daily has become, the health of our world's democracies is dependent on students' ability to access and critically evaluate reliable information. This can be connected to how students may be regularly exposed to and influenced by what is happening in the United States as well. Such information from abroad may be consisting of controversial topics that need to be reflected upon and discussed critically. This relates back to how working with online

source criticism in the English subject is often through working with topics such as politics, race, climate change, conspiracies, and war- and conflict-related events.

One of the interviewed teachers, Arne, responded with an example of experiencing his own children as not being critical and quick to define what they experience as truth. This made for a first-hand description of how being exposed to solely one side of a topic, indicates the issue of exposure to only subjective information in our everyday lives. The research from the Stanford History Education Group (SHEG) in 2016 presented a comprehensive study that found middle school-, high school- and even college-students' ability to consider information on the internet critically as depressing. The SHEG thought that the study would be too simple for the digital natives because of their expertise in mastering social media and all its perks and platforms, and that they would be equally fluent in understanding what they encounter there. However, the results showed quite the opposite, and they concluded their findings with a concern and called for greater attention towards young people's digital literacy (Stanford History Education Group, 2016). This can relate to my own findings, where the interviewed teachers responded with experiencing their students not acting critically towards the online sources they use in the English subject when entering upper secondary school. That their students may be aware of the issue of not acting critical and say that they are critical, when the teachers notice in their work that they are in fact not, and questionable sources are being used. My findings indicate through the answers from the interviewed teachers, that students may benefit from a focus on online source criticism regarding their everyday lives as well. The new curriculum's competence aims with the improved focus on online source criticism may indicate to be of aid even beyond the English subject. Previous research along with my own findings, may indicate that upper secondary school teachers need an emphasis on online source criticism in their teaching. Such a focus can be viewed as transferable for students to thrive in the everyday context as future citizens capable of developing critical thought.

# 5.2.5 Teachers' attitudes towards Wikipedia and usage of online sources versus the textbook

The students today, the digital natives, may possess the digital skill of searching for information online, however it cannot be taken for granted that they possess the competence needed to critically assess the sources they use in the classroom (Blikstad-Balas, 2015). It was found in the research by Blikstad-Balas (2015), that students adapt their own practice in accordance with the teacher's attitude towards online sources, for example the use of Wikipedia. Regarding my own research, the findings concerning the teachers' attitudes towards Wikipedia, their responses may illustrate that EFL upper secondary school teachers today perceive using Wikipedia in the classroom differently. Furthermore, according to Furberg and Rasmussen (2012), the teacher's own perception and attitude towards different online sources will have a direct impact on what online sources the students themselves will use for their work. Wikipedia has become considered as more trustworthy in recent years and is used by fact-checkers (McGrew, 2020). However, there are differences between these professional fact-checkers and students using Wikipedia solely on the grounds of it being used by their teachers and approaching it without being critical to its contents. Blikstad-Balas and Høgenes (2014) found through their study that the greatest benefit of using Wikipedia is its accessibility, in using it for the purpose of defining terms and looking up general information. This could indicate that Wikipedia may not be suitable as an online source used in the English subject if the activity requires students to retrieve reliable information of a controversial

topic and needs to be aware of and practice online source criticism. McGrew (2020) argues further, students will often click on the first or second result that appears when searching for information online, with the belief that the higher a web site is listed in the results, the more trustworthy it is. Typically, Wikipedia is one of the sources that appears as the first or second result.

The perception of Wikipedia was found through the answers from the interviewed teachers to be quite different from each other. Sander and Kirsten answered that they are critical towards using Wikipedia in the classroom. Sander emphasised that it is a bad habit for his students to use it and demands his students to widen their searches and to use other online sources while being critical and sceptical. Similarly, Kirsten answered that she allows her students to use Wikipedia, but it weakens their arguments. Charlotte and Arne viewed the use of Wikipedia a bit differently, where they both answered that Wikipedia is more accepted now than before, and Charlotte answered further that both her as the teacher and her students have been using Wikipedia as a source. Summarized, Sander and Kirsten expressed a critical attitude towards Wikipedia and do not promote the usage of it in their classrooms. On the other hand, Charlotte and Arne considers Wikipedia as accepted and useful to implement as an online source in their teaching, because the thought of Wikipedia as a non-trustworthy source is more of an issue of the past. Charlotte and Arne's answers from my research may be reason for concern related to the previous research from Blikstad-Balas and Høgenes (2014) and Furberg and Rasmussen (2012). The response from Charlotte and Arne may indicate that their personal attitudes towards Wikipedia as a trustworthy web site, may be copied by their students and could potentially be used for other purposes than of looking up terms and general information, which was reported as being the greatest benefit of using Wikipedia. My findings indicate that teachers have different views and attitudes towards the use of Wikipedia, and previous research discuss how their students may adapt their own practice in accordance with the teacher. Wikipedia's greatest disadvantage has been discussed by Blikstad-Balas and Høgenes (2014) as being the varying quality of content. This may indicate that the teachers interviewed in my research with the more accepted view of Wikipedia to potentially develop concerning digital habits regarding their students' use of online sources. Their students may benefit more from retrieving and reading information of topics and issues that requires them to be more critical, in the form of online sources other than Wikipedia that are not as prone to being edited and changed. These findings illustrate conflicting views regarding the use of Wikipedia as an online source in teaching, and that a more united view on its acceptance in the classroom across teachers may benefit students. Relating to the study by Blikstad-Balas (2016a, p.92), both students and teachers seemed to not be evaluating the online encyclopaedia evenly, creating confusion as to what is acceptable in the school's literacy. Teachers with different views on Wikipedia, as found through my findings as well, may cause uncertainty and instability in students. Regarding how the students should navigate themselves when using online sources may seem confusing when it is unclear whether Wikipedia is accepted or not to use.

The consensus across every teacher's answer when discussing the greatest benefits of using online sources over the textbook, was how online sources are dynamic, helps with visualization, and the teachers experiences their students as more engaged. Another similarity in answer was the necessity of implementing online sources to keep up with current affairs and find relevant information of such topics. The textbook was described to be a good starting point but is considered static and not engaging their students as much. The similarity in answer, was that the textbook lacks interesting and engaging

content that catches the students' attention, and each teacher answered that they and their students use online sources to a high extent in their classrooms. An additional finding from my research challenges the use of online sources. By indicating a present issue of the use of online sources exceeding the use of the textbook to a degree where students get tired of the screen time, from both their daily lives and now at school, to the point of exhaustion. Relating back to my findings regarding if the interviewed teachers feel more motivated to work with online sources and online source criticism by the new curriculum, quite the peculiar development arose. Here Arne answered that he feels mostly motivated by the new textbooks to have students use online sources more than before, and that the new textbook tasks encourage research and usage of online sources to a greater extent. This answer may show an increasing trend in using online sources in the classroom in the future, which is unfortunate for the digital natives who would rather sit back and enjoy reading a paper edition. Consequently, this answer from Arne can be related to the study indicating that the growing usage of online sources in the classroom is viewed as supplement to the textbook, rather than replacement (Blikstad-Balas, 2016a, p.73)

With Wikipedia and online sources having such a strong and present position in the classroom, it became an interesting element to explore how the interviewed teachers compare the use of online sources to the textbook as teaching tool. The frequently used computer and online sources for classroom activities presented in the 2019 Monitor report discussed by Fjørtoft et al. (2019), laid foundation for further curiosity from me as a researcher in exploring the textbook's role compared to its digital counterpart of online sources. Charlotte answered in similarity to the other three teachers that she uses online sources to a very high extent and underlined further: "Definitely more than textbooks". The similarity across all interview participants regarding the use of online sources being highly present, may indicate how the school's literacy has for some time now shifted more away from the traditional use of the textbook. As Blikstad-Balas (2016a) claimed, the digitalization of our classrooms is shaping a more individualized school literacy. This can be a positive effect, where students are allowed to frequently use online sources to explore alternative subject texts and information, whereas the negative aspect is that they may use online sources that are not suitable or trustworthy for their given tasks. Further challenges reflected upon by the interviewed teachers when comparing the use of online sources to the textbook, illustrated different and interesting answers. Sander emphasised that the digital aspect simply becoming too overwhelming for the students, where he described a situation from his teaching where a student needed to sit in peace and quiet while reading about what they were working with on paper, instead of reading on the computer. These students who are considered digital natives have grown up immersed in digital technology, and according to The Norwegian Media Authority (2016), have been using the internet and digital communication for most of their lives. A significant amount of their social interactions is occurring through screens, and the use of mobile phones and the internet are of the most common free-time activities amongst the young today (The Norwegian Media Authority, 2016). It is promising when thinking of a greater focus on the development of critical students of online sources, however, it may be important for teachers to remember upholding a healthy and levelled ratio between screen and paper.

#### 5.2.6 The digitally competent teacher

The interviewed teachers' reflections indicate that they all are aware and are working with online source criticism in their teaching, as part of being a digitally competent

teacher, fulfilling aims of the Professional Digital Competence Framework for Teachers (PDCFT). I find these findings to be promising regarding the attitude towards working with online source criticism. Their reflections indicate that even though they are not equally comfortable in their digital competence, they understand the importance and want to improve this focus in their teaching. Even so, it became apparent through these reflections that the aims of the PDCFT are time consuming, requires an additional effort and focus on their teaching, and that there is an individual freedom as to how each teacher approaches the role as the digitally competent teacher.

The guiding policy document, the PDCFT, was made with the intent of establishing a common conceptual framework and frame of reference for what teachers' professional competence entails (Kelentric et al., 2017). The framework emphasizes that it is more important than ever today that students are critical users and active producers, and not passive consumers of information. The PDCFT mentions the role of the teacher, emphasizing that the teacher needs to among other elements be able to foster students that can identify credible information. Additionally, the PDCFT highlights the teaching profession in how it plays the role of realising digitalisation in schools, and the development of digitally competent students (Kelentric et al., 2017). By including this framework in my research, I wanted to explore a theory versus practice juxtaposition. A juxtaposition of how the interviewed teachers experience working with online source criticism, to the aim of the framework wanting to develop digitally competent teachers. Summarized, the professional digital competence is viewed today as essential for teachers' own professional development, and equally important so the students' may develop their basic digital skills as the intentions of the curriculum (Guðmundsdóttir & Ottestad, 2016, p. 72).

The aims of the PDCFT can be put in contrast to the reality of the teacher profession as described by the interviewed teachers in my research. A similarity in answer was that having a strong focus on online source criticism in their teaching was described to be time consuming. Sander experienced this focus as time consuming on the grounds of always needing to be aware of the reliability behind used online sources in class. Arne responded with the similar reflection, finding it time consuming when sorting out what online sources are reliable and good to use in class, when there is so much available on the internet. He further described that he always hopes to find good and reliable sources to use in class and for the students, however, he does not feel there is any guarantee that he always will be able to. Charlotte had a different reflection in her answer. She believes that focusing on online source criticism is a competence that teachers do think about, but there being a great amount of freedom as to how one chooses to approach it. My findings explore the reality of the teaching profession, and it may illustrate that being a professionally digital competent teacher demands time and effort to practice properly. I find the aims of the PDCFT as necessary and relevant. However, put in contrast to my findings it may indicate a freedom in how one chooses to focus on being a digitally competent teacher, and that this development demands a significant amount of time and focus of their teaching.

I explored further through my findings another aspect of the teachers' reality of being digitally competent. They reflected on whether they feel that they have a sufficient focus towards online source criticism or not. The answers were quite different, but Sander and Arne had similar responses where they expressed that a focus towards online source criticism needs to be worked with throughout the year, feels a room for improvement and that it is important to be aware. Additionally, Arne emphasised that a focus on this has

changed drastically compared to the start of his teaching career. The aim of the PDCFT regarding the systematic continuing professional development of teachers, seems as promising when looking at the reflections in my findings. Each teacher seems to understand this as important and wanting to improve their teaching practice in this regard. Although it may differ in how each teacher approaches it because there seems to be a freedom, as to how much attention one chooses to implement in the classroom. Regardless, I experience through my findings a positive trend, where the focus on online source criticism seems present for each teacher. Additionally, the aim from the PDCFT describing the systematic continuing professional development, compared to the interviewed teachers' focus and wish to improve, may be considered as present and promising in today's upper secondary school EFL classrooms.

## 5.3 Implications

Through my research I have attempted to answer my research question, "How do Norwegian EFL upper secondary school teachers perceive and prioritize working with online sources and their varying reliabilities?". In this study I utilized semi-structured interviews as my data collecting method. By conducting this research, it contributes to research within online source criticism, and more specifically in the Norwegian upper secondary school EFL-teaching context. My study indicates that Norwegian EFL upper secondary teachers are using online sources to a very high extent in their teaching. Additionally, my study shows that they express a significant focus on and willingness to improve on their work with online source criticism. This may be viewed as a positive connection to the increasing digitalization of the classroom and our world, and intentions of the new curriculum and the Professional Digital Competence Framework for Teachers (Kelentric et al., 2017). The findings derived from my research may contribute to an improved teaching practice, by generating reflections as to why a focus on online source criticism in the English subject is crucial in developing future critical thinking citizens.

Moreover, the findings may hopefully result in a greater attention amongst upper secondary English teachers towards online source criticism, as it became apparent that students need it and benefit from focusing on it in the classroom. As online source criticism has been emphasised in other subjects, as well as being a frequent interdisciplinary topic, I argue that my findings have implications for teachers across other subjects. As part of the digital basic skill, online source criticism may be viewed as an essential part of student competence and consequently essential to focus on in the teaching context. This study may illustrate and argue the importance of online source criticism as part of teaching, not only in the EFL- and upper secondary school-context, but for subjects and schools overall. There has not been discovered much previous research on online source criticism within the English subject from Norwegian teachers' point of view, especially after the arrival of the new curriculum. Furthermore, the study shows how teachers are reflecting upon why this is important and describe the implementation of online source criticism in the new climate of teaching following the new curriculum. Consequently, due to the lack of research within this area, the findings from my research may contribute to an insight into Norwegian EFL-teachers' reality of perceiving and working with online source criticism. Additionally, this research may be of aid to teacher education as well. Because it is a competence required of future teachers to be digitally competent and to focus on online source criticism as the new curriculum demands.

#### 5.3.1 Study limitations

While I argue that my study answers the research question, there are certainly limitations to it. I have semi-structured interviews as the only data collecting method. Since I am exploring solely the interviewed teachers' point of view, I would have benefitted from collecting further empirical material from students as well to support or challenge my findings from the interviews, and I acknowledge this as a weakness of my research. And by having such a small number of participants solely through qualitative interviews, it is impossible to generalize my findings. Furthermore, the issue of validity, where the answers collected through the interviews do not have any guarantee of being true, other than assuming the participants to be honest. They may have chosen to answer in a way that puts them in a better light, than what their teaching reality involves.

## 5.3.2 Recommendations for further research

Previously mentioned, there is a lack of prior research within the area of online source criticism in the teaching context after the arrival of the new curriculum. With my research only covering qualitative research in the form of conducting interviews of a small number of participants, the possibilities to extend the research further are many. Including more interview participants may create a greater picture of teachers' realities and present more diverse findings in answers. Adding quantitative research in the form of questionnaires given to students, would also support and challenge the research further. Extending the research by expanding number of participants and including quantitative questionnaires to retrieve answers from students, are recommendations that I believe the area of online source criticism would benefit immensely from. Another recommendation would be to do comparative studies exploring the transition of working with online sources and online source criticism across age groups and schools.

#### 5.4 Conclusion

The European Commission's report (2018) argued how disinformation is having a severely negative impact on our societies. As teachers there is now a strengthened need through the new curriculum to prioritise students' ability to be critical towards online sources and included as part of their digital competence and the digital basic skill (The Norwegian Directorate for Education and Training, 2020c). Additionally, the rationale behind this research has been the report from The Norwegian Media Authority (2020) presenting today's students' digital habits, along with the increasing digitalization and great use of online sources in the upper secondary school classroom (Fjørtoft et al., 2019). Consequently, the goal of this study has been to investigate how Norwegian EFL upper secondary school teachers perceive and prioritise working with online sources and their varying reliabilities. By exploring findings through the conducted interviews, it may illustrate a positive response of how teachers are prioritising online source criticism in their EFL teaching. In accordance with the goals of the Professional Digital Competence Framework for Teachers (Kelentric et al., 2017), this study may indicate that there are self-reflections and descriptions of teaching that argues for a development of teachers' professional digital competence. It was discovered that prioritizing online source criticism can be time consuming, and that it may not always be as easy to include for teachers but has been given a clearer focus and prioritization through new competence aims (The Norwegian Directorate for Education and Training, 2020a;2020b). Similarly, to the results from the comprehensive research by The Stanford History Education Group (2016), this study presents how even at the upper secondary level, according to the teachers, their students often lack critical thinking of online sources. Fortunately, the

interviewed teachers consider online source criticism in their teaching of high importance, considers it to function well in interdisciplinary teaching, and expressed an understanding of why this is important to include in their EFL classrooms. It was made clear that every teacher interviewed emphasised the importance of developing critical thinking students, through working with online source criticism. Moreover, this study has hopefully provided some insight into how the use of online sources in the classroom can be compared to the traditional usage of the textbook, illustrating both sides of benefits and challenges, that may be useful to consider for future teachers and present teachers alike. Hopefully, these findings may also present elements of what the reality of a focus on online source criticism as an EFL teacher today entails, which may be considered in the future to thrive as a digitally competent educator further.

# Reference list

- Alexanderson, K. (2012). Källkritik på internet (Vol. 25).. SE: s Internetguider.
- Area, M., & Pessoa, T. (2012). From solid to liquid. *Scientific Journal of Media Education*, 38(XIX), 13–20.
- Bachmann, K.E. (2005). *Læreplanens differens: formidling av læreplanen til skolepraksis*. (Doctoral dissertation-thesis), NTNU.
- Bennett, S. (2012). Digital natives. In *Encyclopaedia of cyber behaviour* (pp. 212-219). IGI Global.
- Braun, V. & Clarke, V. (2006). *Qualitative Research in Psychology*, 3 (2), 77-101. Retrieved from https://doi.org/10.1191/1478088706qp063oa
- Blikstad-Balas, M. (2015). Skolens nye literacy Hvordan endres skolens tekstpraksiser når digital teknologi er tilgjengelig i klasserommet? *Learning Tech-Tidsskrift for læremidler, didaktikk og teknologi*.

  Retrieved from
  - https://www.duo.uio.no/bitstream/handle/10852/48998/Skolens-nye-literacy-learningtech-EGENARKIV.pdf?sequence=4&isAllowed=y
- Blikstad-Balas, M. (2016a). Literacy i skolen. Universitetsforlaget.
- Blikstad-Balas, M. (2016b). Faglig og ikke-faglig bruk av teknologi i klasserommet. I Krumsvik, RJ (red.). *Digital læring i skole og lærerutdanning*, 2, 136-150.
- Blikstad-Balas, M. & Hvistendahl, R. (2013). Students' digital strategies and shortcuts.

  Nordic Journal of Digital Literacy.

  Retrieved from

  https://www.idunn.no/doi/full/10.18261/ISSN1891-943X-2013-01-02-03
- Blikstad-Balas, M., & Høgenes, T. (2014). Wikipedias inntog på kildelista-holdninger blant lærere og elever til Wikipedia i en skolekontekst. *Acta Didactica Norge*, 8(1), 2-17.

  Retrieved from <a href="https://journals.uio.no/adno/article/view/1094">https://journals.uio.no/adno/article/view/1094</a>
- Brinkmann, S. & Tanggaard, L. (2012). *Kvalitative metoder: empiri og teoriutvikling*. Gyldendal Norsk Forlag AS.
- Breakstone, Smith, M., Wineburg, S., Rapaport, A., Carle, J., Garland, M., & Saavedra, A. (2021). Students' Civic Online Reasoning: A National Portrait. *Educational Researcher*, *50*(8), 505–515.

  Retrieved from <a href="https://doi.org/10.3102/0013189X211017495">https://doi.org/10.3102/0013189X211017495</a>
- Buckingham, D. (2015). Defining Digital Literacy What do young people need to know about digital media? *Nordic Journal of Digital Literacy*, pp.21-35.

  Retrieved from
  - https://doi.org/10.18261/ISSN1891-943X-2015-Jubileumsnummer-03

- Creswell, J.W. (2009). Research design: qualitative, quantitative, and mixed methods approaches (3rd ed., pp. XXIX, 260). SAGE.
- Crotty, M. (1998). The foundations of social research: meaning and perspective in the research process. SAGE Publications.
- Curran, J., Fenton, N., & Freedman, D. (2016). Misunderstanding the internet. Routledge.
- European Commission (2018). *A Multi-Dimensional Approach to Disinformation*.

  Luxembourg: European Commission (Directorate-General for Communications Networks, Content and Technology).
- Falloon, G. (2020). From digital literacy to digital competence: the teacher digital competency (TDC) framework. *Educational Technology Research and Development*, 68(5), 2449–2472.

  Retrieved from <a href="https://doi.org/10.1007/s11423-020-09767-4">https://doi.org/10.1007/s11423-020-09767-4</a>
- Fjørtoft, S. O., Thun, S., & Buvik, M. P. (2019). Monitor 2019. En deskriptiv kartlegging av digital tilstand i norske skoler og barnehager.

  Retrieved from

  <a href="https://www.udir.no/contentassets/92b2822fa64e4759b4372d67bcc8bc61/monitor-2019-sluttrapport\_sintef.pdf">https://www.udir.no/contentassets/92b2822fa64e4759b4372d67bcc8bc61/monitor-2019-sluttrapport\_sintef.pdf</a>
- Fontana, A., & Frey, J. H. (2000). From Structured Questions to Negotiated Text. In N.K. Denzin & Y.S. Lincoln (Ed.), *Handbook of Qualitative Research* (pp. 645-672). Thousand Oaks: Sage Publications, Inc.
- Frønes, T. S. & Weyergang, C. (2020). Kapittel 7. Å lese kritisk: Elevers vurderinger av teksters troverdighet og pålitelighet. I Like muligheter til god leseforståelse? (s.166–195). idunn.no.

  Retrieved from <a href="https://doi.org/10.18261/9788215040066-2020-07">https://doi.org/10.18261/9788215040066-2020-07</a>
- Furberg, A., & Rasmussen, I. (2012). Faktaorientering og forståelsesorientering i elevers bruk av nettbaserte læringsomgivelser. T. E. Hauge & A. Lund (Red.), Små skritt eller store sprang? Om digitale tilstander i skolen. Oslo: Cappelen Damm Akademisk.
- Garrett, H. J. (2019). Why Does Fake News Work? On the Psychosocial Dynamics of Learning, Belief, and Citizenship. In W. Journell (Ed.), Unpacking Fake News, An Educator's Guide to Navigating the Media with Students (pp. 15-29). New York: Teachers college press.
- Goodall, J. (2018). Learning-centred parental engagement: Freire reimagined. *Educational Review (Birmingham)*, 70(5), 603–621. Retrieved from <a href="https://doi.org/10.1080/00131911.2017.1358697">https://doi.org/10.1080/00131911.2017.1358697</a>
- Guðmundsdóttir, G.B, & Ottestad, G. (2016). *Veien mot profesjonsfaglig digital kompetanse for lærerstudenten*. In R.J. Krumsvik (Ed.), Digital læring i skole og lærerutdanning (2nd ed). Oslo: Universitetsforlaget.

Kalsnes, B. (2017). Why we should use more specific terms than "fake news" when we talk about false information. *Bente Kalsnes' Blog*.

Retrieved from

https://bentekalsnes.wordpress.com/2017/10/01/why-we-should-use-more-specific-terms-than-fake-news-when-we-talk-about-false-information/

Kelentric, M., Helland, K. & Arstorp, A. T. (2017) Professional Digital Competence Framework for Teachers. *The Norwegian Centre for ICT in Education*. Retrieved from <a href="https://www.udir.no/qlobalassets/filer/in-english/pfdk">https://www.udir.no/qlobalassets/filer/in-english/pfdk</a> framework en low2.pdf

Kristensen, A. (2020). Hva fremmer og hemmer bruk av digital teknologi-sett fra læreres perspektiv? *Psykologi i kommunen nr.6 2020.* 

Retrieved from

https://nordopen.nord.no/nordxmlui/bitstream/handle/11250/2731395/Kristensen.pdf?sequence=5

e S. & Brinkmann, S. (2015). Det kvalitative forskningsinterviu (3. utg.)

- Kvale, S., & Brinkmann, S. (2015). *Det kvalitative forskningsintervju* (3. utg.). Oslo: Gyldendal Norsk Forlag.
- Kvale, S., & Brinkmann, S. (2009) *Interviews Learning the Craft of Qualitative Research Interviewing* (2<sup>nd</sup> ed). Los Angeles, London, New Delhi, Singapore: SAGE Publications.
- Leth, G., & Thurén, T. (2000). *Källkritik för internet*. Stockholm: Styrelsen för psykologiskt försvar.
- Martin, A. (2005). DigEuLit-a European framework for digital literacy: a progress report. *Journal of eLiteracy*, 2(2), 130-136.

  Retrieved from <a href="http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.469.1923&rep=rep1&type=pdf">http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.469.1923&rep=rep1&type=pdf</a>
- McGrew, S. (2020). Learning to evaluate: An intervention in civic online reasoning. *Computers and Education, 145*, 103711.

  Retrieved from

https://www.sciencedirect.com/science/article/pii/S0360131519302647?casa\_tok\_en=1aCBNNwKv1kAAAAA:8cRugQR1sgjAl3UCKQXsx5-uBGunA5mPCGoiL6z30iDtlR5l8ipK0sYO2DA1OndtXA1QoU4pRtOO

- McGrew, S., Breakstone, J., Ortega, T., Smith, M., & Wineburg, S. (2019). *How Students Evaluate Digital News Sources*. In W. Journell (Ed.), Unpacking Fake News, An Educator's Guide to Navigating the Media with Students (pp. 60-73). New York: Teachers college press.
- Ng, W. (2012). Can we teach digital natives digital literacy? *Computers and Education*, *59*(3), 1065–1078.

  Retrieved from <a href="https://doi.org/10.1016/j.compedu.2012.04.016">https://doi.org/10.1016/j.compedu.2012.04.016</a>
- Pangrazio, L. (2016). Reconceptualising critical digital literacy. *Discourse (Abingdon, England)*, *37*(2), 163–174.

Retrieved from

https://doi.org/10.1080/01596306.2014.942836

- Postholm, M. B., & Jacobsen, D.I. (2018). Forskningsmetode for masterstudenter i lærerutdanning. Cappelen Damm Akademisk.
- Prensky, M. (2001). Digital Natives, Digital Immigrants Part 1. *On the Horizon, 9*(5), 1-6. Retrieved from https://doi.org/10.1108/10748120110424816
- Rubin, H.J., & Rubin, I.S. (2005). *Qualitative Interviewing. The Art of Hearing Data* (2.utg.) Thousand Oaks, Ca: Sage.
- Steensen, S. (2019). Journalism's epistemic crisis and its solution: Disinformation, datafication and source criticism. *Journalism*, *20*(1), 185-189.

  Retrieved from https://journals.saqepub.com/doi/full/10.1177/1464884918809271
- Strømsø, H.I. & Bråten, I. (2014). Students' Sourcing While Reading and Writing From Multiple Web Documents. *Nordic Journal of Digital Literacy*, 2014(2), 92–111. Retrieved from https://www.idunn.no/doi/full/10.18261/ISSN1891-943X-2014-02-02
- The Norwegian Directorate for Education and Training. (2006). *English. Basic skills.* (ENG1-01).

  Retrieved from

https://www.udir.no/kl06/ENG1-01/Hele/Grunnleggende ferdigheter

The Norwegian Directorate for Education and Training. (2013). *English. Basic skills.* (ENG1-03).

Retrieved from

https://www.udir.no/kl06/ENG1-

03/Hele/Grunnleggende ferdigheter?lplang=http://data.udir.no/kl06/nob

The Norwegian Directorate for Education and Training. (2017). Framework for basic skills. Digital skills as basic skill.

Retrieved from

https://www.udir.no/laring-og-trivsel/rammeverk/rammeverk-for-grunnleggende-ferdigheter/2.1-digitale-ferdigheter/

The Norwegian Directorate for Education and Training. (2020a). Competence aims and assessment. Competence aims after Year 10. (ENG01-04).

Retrieved from

https://www.udir.no/lk20/eng01-04/kompetansemaal-ogvurdering/kv4?lang=nob

The Norwegian Directorate for Education and Training. (2020b). Competence aims and assessment. Competence aims after Vg1 programme for general studies. (ENG01-04)

Retrieved from

https://www.udir.no/lk20/eng01-04/kompetansemaal-ogvurdering/kv6?lang=nob The Norwegian Directorate for Education and Training (2020c). *English. Basic skills.* (ENG01-04).

Retrieved from

https://www.udir.no/lk20/eng01-04/om-faget/grunnleggende-ferdigheter?lang=nob

The Norwegian Media Authority. (2016). Barn og medier 2016. Barn og unges (9-16 år) bruk og opplevelser av medier.

Retrieved from

https://www.medietilsynet.no/globalassets/publikasjoner/barn-og-medier-undersokelser/2016 barnogmedier.pdf

The Norwegian Media Authority. (2020). BARN OG MEDIER 2020 En kartlegging av 9-18-åringers digitale medievaner.

Retrieved from

https://www.medietilsynet.no/globalassets/publikasjoner/barn-og-medier-undersokelser/2020/201015-barn-og-medier-2020-hovedrapport-med-engelsk-summary.pdf

Thurén, T. (2005). Källkritik. Stockholm: Liber AB.

- Tønnesen, E.S. (2013). Læreboka som kunnskapsdesign. In N. Askeland, E. Maagerø and B. Aamotsbakken (ed.), *Læreboka studier I ulike læreboktekster* (147-163). Trondheim: Akademika forlag.
- UNESCO. (2013). Global Media and Information Literacy Assessment Framework:

  Country Readiness and Competencies: United Nations Educational, Scientific and
  Cultural Organization (UNESCO).
- Wineburg, S. & McGrew, S. (2018) Lateral Reading and the Nature of Expertise: Reading Less and Learning More When Evaluating Digital Information. Stanford Digital Repository.

Retrieved from

https://purl.stanford.edu/yk133ht8603

Wineburg, S., & McGrew, S. (2016). Evaluating information: The Cornerstone of Civic Online Reasoning. Stanford Digital Repository.

Retrieved from

https://purl.stanford.edu/fv751yt5934

# List of Appendices

- Appendix A: Interview guide
- Appendix B: Analyses of transcriptions. Similarities and differences.
- Appendix C: NSD Research information- and consent form

# Appendix A: Interview Guide

# "How are Norwegian EFL High School teachers guiding their students when working with digital text and its varying reliability?"

#### Generelt

Presenterer oppgave og årsak til intervju.

Hvor lang erfaring som engelsklærer på videregående?

Andre erfaringer som lærer?

Andre fag du har undervist?

Utdanning?

#### Erfaring med digitale tekster og kildekritikk generelt

I hvilken grad bruker du selv, eller gir muligheten til dine elever å bruke og jobbe med digitale tekster gjennom bruk av for eksempel PC?

- Under hvilke omstendigheter forekommer det at du og dine elever jobber med digitale tekster?
- Hva er årsaken til at du tar i bruk digitale tekster?

I hvilken grad føler du den nye læreplanen LK20 oppfordrer til et større fokus rundt bruken av digitale tekster og kritisk kildebruk?

 Vil du si et større fokus på dette er nødvendig nå som den lenge økende digitaliseringen av klasserommet, og i elevenes liv ellers, er høyst til stede? Hvorfor/hvorfor ikke?

Føler du det forekommer som naturlig å inkludere digitale tekster og kildekritikk som del av engelskundervisningen? Hvorfor/hvorfor ikke?

Har det gjennom din tid som lærer vært et signifikant søkelys på å informere og undervise elever om digitale tekster og det å være bevisst på kritisk kildebruk? Om det er tilfellet, hvordan har du bistått elevene med dette?

- Er dette noe elevene dine ofte har uttrykt at de trenger hjelp til eller er usikre i arbeidet med?

#### Bruken av digitale tekster og pålitelighet av kilder i undervisningen

I hvilken sammenheng tenker du først og fremst på når jeg nevner digitale tekster i undervisningssammenheng i engelskfaget? Kan du gi meg et eksempel på dette?

Føler du på et behov for, eller ser generelt et behov for, at dette bør iverksettes mer i engelskfaget? (digitale tekster og kritisk kildebruk). Hvorfor/hvorfor ikke?

Hvor mye mer oppmerksomhet vil du gi dette i din undervisning? Føler du at det finnes behov for det?

Hvordan ser du på fordelene et fokus på digitale tekster og kritisk kildebruk av disse kan gi, sammenlignet med andre områder innad i engelskfaget? Er et slikt fokus verd det? Hvorfor/hvorfor ikke?

Tror du et slikt fokus fungerer som grunnlag for videre diskusjon angående kildekritikk i elevenes daglige liv utenfor skolen? Hvorfor/hvorfor ikke?

Oppfordrer du ofte elevene til å bruke digitale kilder? Om ja: Har du tilsvarende oppmerksomhet på å bistå elevene angående kritisk kildebruk?

### Tverrfaglig avslutningsspørsmål

Som lærer er det vanlig å ta i bruk digitale kilder og tekster, ikke bare i engelskundervisning eller språkundervisning. Når er det da aktuelt å rette oppmerksomheten på kritisk kildebruk?

# Appendix B: Analyses of Transcriptions – Similarities and Differences

This appendix is meant to provide transparency of the analyses of transcriptions, and how categories and subcategories were used in structuring the empirical material. Only one of these tables were presented in the thesis, Table 2., however by including every category in an appendix presents a greater image of the analysis process.

Differences are defined by deviations in meaning of participants' answers. The meanings are defined exactly from the literal utterances of participants, and there has not been made any presumptions or guessed meanings. From the researcher point of view, I would have considered any ironic or unserious answers given, however, through my analysis I have not made any discoveries of answers of such nature. The deviations can involve personal opinions or preferred teaching methods, and general views on teaching and their role as a teacher. A deviation can in addition occur when bringing up an element in their answer regarding the given subcategory which does not align compared to most meanings and answers expressed in that subcategory by all interviewees. Differences highlighted in RED.

The eight different categories and their own subcategories are presented in the following pages.

## Table 1. The new curriculum LK20

This table refers to the category named after the new curriculum, LK20. The table consists of how the interviewed teachers, if mentioned, view working with online source criticism in the general studies programme compared to the vocational studies programme in the upper secondary school. In addition, how they feel motivated by the new curriculum's strengthened focus on online source criticism, and if the interviewed teachers feel that the focus on online source criticism is sufficient as it is now.

### The new curriculum LK20

	Transcription A (Sander)	Transcription B (Kirsten)	Transcription C (Charlotte)	Transcription D (Arne)
General	Vocational may	Less	More suiting for	Not mentioned
studies	need more	opportunities	study	in interview.
programme	attention from	for continued	specialization	
vs. vocational	teacher.	work in	and college	
programme	Competence	vocational.	oriented.	
	aims more	Competence	Vocational	
	suiting for	aims more	programme	
	study	suiting for	more practical	
	specialization	study	English and not	
	programme	specialization	a great focus.	
		programme	Could benefit	
		(English 1 and	from having	
		2).	more about it	
			in vocational.	
Motivation	To a very high	Especially	To a very high	Encouraged by
	extent.	important now	extent.	new textbooks
	Important	with the new	Especially	to use online
	competence	curriculum.	through	sources. Tasks
	and aids the		competence	in new
	teachers.		aims for VG1,	textbooks
			English 1 and	encourages
			2.	research and
				usage of online
				sources to
				greater extent
Current focus	Adequate	Sufficient.	Sufficient.	Emphasized
	amount. Not	Helps with	Higher extent	more now
	too many	clear	than before	through
	competence-	competence	with new	competence
	aims compared	aims dedicated	curriculum.	aims.
	to LK06.	to looking at,		Great focus
		analysing, and		with source
		critical thinking		criticism and
		regarding		using online
		sources.		sources as part
				of basic skill.

# Table 2. Teachers' usage of online sources as classroom resource and amount of focus on online source criticism

The table below illustrates to what extent the interviewed teachers answered that they use online sources as a classroom resource. In addition, how they view their focus on online source criticism versus their usage of online sources, and if whether they feel they have a good balance and equivalent focus on both.

# Teachers' usage of online sources as classroom resource and amount of focus on online source criticism

	Transcription A	Transcription B	Transcription C	Transcription D
	(Sander)	(Kirsten)	(Charlotte)	(Arne)
Usage of online sources as classroom resource	To a very high extent. As a result of LK06 and now especially with LK20.	To a very high extent with how the classrooms have become.	To a very high extent. Definitely more than textbooks.	To a pretty high extent. Depends on topic.
Usage of online sources compared to focus on source criticism in their teaching	Equivalent amount of focus.	Source criticism as natural and integrated part of teaching. Worked with systematically and constantly. Never put away.	Equivalent amount of focus. Source criticism as natural and integrated part of teaching. Less at the vocational studies because of the nature of English there.	Tries to the best of the teacher's ability. Has changed drastically compared to the start of the career.
Students expressing need for guidance in being source critical	Students do not express wanting help themselves. Takes what they find on the internet for granted as true. A process that the teacher feels they are getting better at.	Hard for them to know what needs to be sourced. Impression that students do not know how to reference and use sources correctly when starting VG1. Take it for granted what they find as true. Students aware of it and find it interesting to work with.	Seems as if they are taking what they find on the internet for granted as being true. When entering VG1 questionable sources are being used. Lack the critical eye, even though does not feel this is anything new for them.	Heard about the issue of being source critical but does not necessarily mean that they are being critical. Very individual in students expressing wanting help. Should not be anything new to 16-year-olds, because internet used all their years at school. Depends on the source if they are taking the information for granted as true and is about perspective.

Table 3. Online sources and source criticism as part of the English subject

## Online sources and source criticism as part of the English subject

	Transcription	<u>Transcription</u>	Transcription	Transcription
	A (Sander)	B (Kirsten)	C (Charlotte)	D (Arne)
Teaching online source criticism as part of the English subject	Feels absolutely natural. Exposed to English everywhere in life all the time, need for critical thinking and very important competence aim. English subject not only language, but culture and information as well.	Always been natural but is task dependent. Nowadays an important topic and students find it interesting. Definitely a need for it in the interviewee's teaching, definitely.	Feels natural, except for grammar, task dependent. Appears naturally in societal topics and text production tasks.	Feels as natural and integrated part of teaching especially through certain topics and longer writing tasks. Through the new textbooks with the topic of fake news, and example tasks for exams that include this. Depends on the teacher and what is being
Including online source criticism in teaching compared to other areas of the English subject	Absolutely worth to focus on. Formed not only through education, but the entirety of our lives. Creates foundation in students' ability to be critical citizens.	Benefits of being college oriented. Does not want to include it at the expense of other areas. College-oriented is the most appropriate focus.	Focus is equated compared to other areas. Relevant throughout the year within certain topics and subjects. Never put on the shelf.	worked with.  The focus is worth it.  Necessary and important part of shaping future citizens.  Relevant to include within most societal parts of English.

Table 4. The use of online sources compared to the textbook as teaching tool

## The use of online sources compared to the textbook as teaching tool

	Transcription	Transcription	Transcription	Transcription
	A (Sander)	B (Kirsten)	C (Charlotte)	D (Arne)
Benefits of using online sources compared to the textbook	Visualization, online sources are dynamic. Students use more of their senses and are more engaged.	Amount of information available. Textbook is very, very limited. Textbook a good starting point but is static and gets old fast.	Textbooks outdated and associated with boring things. Not working well in catching students' interests. New textbooks seem more promising. Lack of motivation may be from ten years of schooling with the textbook	Need online sources to keep up with current affairs. Lack of interesting things in the textbook compared to what can be found of online resources. New textbooks encourage more use of online sources.
Challenges of using online sources compared to the textbook	Digital aspect can become too much. Too much exposure to the digital world both in school and their free time. Experienced students who wanted to sit in peace and quiet and read a paper edition.	Students grown up with everything being online and information being immediate and accessible. Therefore, so important to focus on being critical.	prior to VGS  A lack of access to academic sources at high school.	Not mentioned in interview.

Table 5. Importance of developing critical thinking students

# Importance of developing critical thinking students

	Transcription	Transcription	<b>Transcription</b>	Transcription
	A (Sander)	B (Kirsten)	C (Charlotte)	D (Arne)
Teachers' Attitudes towards Wikipedia	Critical towards it. Bad habit for the students. Need to have a wider view on search results, and to be more critical and sceptical.	Critical towards it. Can use it but weakens arguments. Much easier for the students to use Wikipedia, because being critical and doing more research takes time.	A bit more accepted now than before. Teacher and students have used Wikipedia as source.	Students aware of Wikipedia seen as non-reliable, but teacher thinks these are thoughts of the past. Maybe OK to use Wikipedia now, because there are so many who checks and edits the pages.
Relevance of online source criticism in the students' everyday lives	Exposed to English everywhere in life as the lingua franca. Need for critical thinking. Highly relevant today and towards information. As future citizens and need to form them more critical towards information.	Necessary because of the digitalization of everything. Need to be media literate and aware of where we get our information. Students are aware of fake news and are critical but are easily influenced by friends and media of what they choose to believe. Repercussions of misinformation in the U.S. with Trump.	Absolutely necessary because of the digitalization of classrooms and in life itself. Need to be critical of the sources and avoid subjective information only. Easy to fall into echo chambers.	Thinks this is the most important aspect. The massive flow of information you are exposed to, both the young and older people. Has become an educational mission especially important as society has become. Extra dimension in the English subject because of the focus on the U.S.  Responsibility both as an adult and teacher.

Online source criticism in the higher education and work context	Important for both higher education and in future careers. When becoming working citizens, they need to be critical in their work and future.	Sees the benefits being college oriented.	Very important. Study specialization vs. vocational studies changes nature of English subject. Emphasized less in the vocational, however, could benefit from greater focus.	Experienced own children not being critical who were quick to define what they experience as truth, when only exposed to something from one side. Not mentioned in interview.
Online source criticism functioning as a foundation for further discussion	Absolutely functions as foundation. General etiquette and observant of everything that influences them. Being critical has a strong transfer value in their daily lives.	Yes, to it functioning as foundation. Regarding the day-to-day bombardment of information that students get. Especially for us in democratic society, essential to be digitally literate/media literate.	Absolutely sees it as foundation. Shaping the students and important to make sure they are drilled on this. Believe students take it with them, however, would be best to ask students. But believes they do take it with them.	Surely hopes so. Importance of shaping students who are critical towards the massive flow of information. A goal to shape students as critical, so they avoid accepting everything they encounter as true.

Table 6. Professional Digital Competence Framework for Teachers

# Professional digital competence framework for teachers (PDCFT)

	Transcription A	Transcription B	Transcription C	Transcription D
	(Sander)	(Kirsten)	(Charlotte)	(Arne)
Teaching	Demanding of	Finds it hard to	Thinks this is a	So much
online source	teachers and	devote as much	competence that	available, so
criticism as	subject team in	time as	many teachers	time demanding
time	cooperating with	interviewee	think about,	to sort out what
demanding	colleagues and	wants at VG1.	however, a lot of	online sources
	improving digital	However, a	freedom in how	are relevant and
	competencies.	continuation in	one chooses to	good enough to
	Teacher needs to	English 1 and 2.	approach it.	use. Hopes to
	be aware and		Depends on the	find good and
	securing		teacher, but this	reliable sources
	reliability in class		has always been	when working
	demands time.		important.	with students but
				does not feel
				there is a
				guarantee that
				the teacher is
				able to.
				Experiences it as
				a responsibility,
				tries to take it
				seriously.
Teachers'	Teacher feels	Not mentioned in	Thinks the	Feels there is
reflections on	this needs to be	interview.	teacher's focus is	room for
the focus on	worked with		good and plans	personal
online source	continuously		to uphold that.	improvement,
criticism in	throughout the		Can typically be	and important to
their teaching	year, not just for		discussed in	be aware. The
	a couple of		network	teacher tries to
	weeks or two		meetings with all	the best of the
	school lessons.		the other English	teacher's ability
			teachers in the	in aiding the
			county. Not	students. Focus
			personally	changed
			affected by shift	drastically
			from LK06 to	compared to the
			LK20. Something	start of the
			that is	career.
			dependent on	
			the teacher and	
			possibly their	
			digital	
			competence.	

Table 7. Interdisciplinary attention

# Interdisciplinary attention

]	<u>Franscription</u>	Transcription	Transcription	Transcription
<u>#</u>	A (Sander)	B (Kirsten)	C (Charlotte)	D (Arne)
E	Believes it has	Across certain	Natural	Relevant in
a	a natural	topics and	through certain	every subject
i	nterdisciplinary	subjects, it	interdisciplinary	more or less,
f	ocus. A good	feels as natural	topics. English,	except for P.E.
c	opportunity to	implementation	Norwegian,	and math.
s	show students	and organic.	geography,	Cooperating
C	differences	Interdisciplinary	science.	with social
b	oetween	with science,	Conspiracy	studies teacher
r	reliable sources	retrieve	theories and	with the topic
a	and alternative	information and	cancel culture.	of global
f.	acts, climate	check	Typically, at	issues. A
c	deniers, people	reliability.	VG1 because of	common
V	with own facts	Suiting when	the same	responsibility
a	and own	working with	subjects in	across many
s	sources,	for example	their classes	subjects.
c	creates	sustainable	and makes it	
c	discussion	development,	easier to	
r	regarding what	climate deniers,	cooperate. Low	
t	to believe and	and very	threshold	
t	rust. Part of	relevant today	cooperating	
t	hree-part	with vaccine	with social	
i	nterdisciplinary	conspiracies	studies teacher	
t	copics. Strong	and	and agree on	
C	connections	conspiracies.	sources to be	
t	cowards		used and	
C	common		demand source	
C	objectives in		criticism	
L	_K20. Critical		thereafter.	
S	source usage			
C	one of the			
p	points in			
	nterdisciplinary			
	eam, and			
	eachers help			
e	each other in			
t	this direction			

Table 8. Task dependent

# Task dependent

	Transcription	<u>Transcription</u>	Transcription	Transcription D
	A (Sander)	B (Kirsten)	C (Charlotte)	(Arne)
Types of	Yes, is task	Yes, is task	Yes, is task	Yes, is task
tasks	dependent.	dependent.	dependent.	dependent. Longer
	Smaller tasks	Through both	Discussion	writing tasks,
	require little	writing tasks,	tasks where	discussion tasks.
	preparation	and project	they need to	Different if the
	and analytic	work where	back up their	students are
	depth and are	they gather	arguments.	supposed to read
	not that	information	Uses online	factual information
	influenced.	online. Many of	sources for	about
	Concrete tasks	writing and	everything.	something/someone
	requiring	speaking tasks		and it is less likely
	usage of online	involve having		that the source is
	sources	an opinion,		not reliable.
	requires	give example		
	important	of point of		
	focus by the	views, then		
	teacher. Needs	need to		
	to illustrate	support		
	difference	opinions with		
	between	source. Wants		
	reliable	reflection to		
	sources and	occur		
	alternative	organically in		
	facts.	class when for		
		example asks		
		the students		
		when having		
		discussions.		
		Competence		
		aim achieved		
		through for		
		example		
		looking at news		
		story from		
		different		
		websites with		
		credibility		
		check list,		
		looking at		
		objectivity,		
		precision in		
		language etc.		

Topics	Not mentioned	Has	Social issues,	Politics, climate,
	in interview.	concentrated	news articles,	and controversial
		topic for online	professional	topics. News related
		sources. Social	articles,	events and when it
		media, fake	because of	is different sides to
		news, types of misinformation,	being so much available. An	the same issue.
		disinformation,	example was	
		racism in the	the context	
		U.S. a good	between Brexit	
		example of	and	
		topic needing	immigration	
		focus on	and feelings	
		objectivity,	regarding	
		credibility,	immigration.	
		precision in		
		language etc.		
		Feels more		
		organic under		
		certain topics.		

### Appendix C: NSD Research Information- and Consent Form

# Vil du delta i forskningsprosjektet

# "How do Norwegian EFL High School teachers guide their students when working with online sources and their varying reliability"?

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å få innblikk i arbeidet og undervisningen angående digitale kilder og søkelys på kildekritikk i engelskfagets klasserom ved den videregående skole. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

### Formål

Formålet med masterprosjektet er å få et innblikk i hvordan engelsklærere ved videregående jobber med digitale tekster og kritisk kildebruk. Dette er en masteroppgave, og forskningsspørsmålet lyder som følger:

«How do Norwegian EFL High School teachers guide their students when working with online sources and their varying reliability? »

Intervjuet vil bli tatt opp med lydopptaksmaskin eid av NTNU. Data som innhentes gjennom intervjuene vil bli transkribert anonymt. Opptakene slettes når prosjektet avsluttes i mai 2022.

### Hvem er ansvarlig for forskningsprosjektet?

NTNU er ansvarlig for prosjektet.

### Hvorfor får du spørsmål om å delta?

Du får spørsmål om å delta fordi du underviser i det aktuelle faget, engelsk, på videregående skole. Den videregående skolen er blitt valgt på grunnlag av at det er der kompetansemålene og sluttvurderingene tar for seg kritisk tenkning og refleksjon i størst og mest avansert grad.

### Hva innebærer det for deg å delta?

Metoden som blir brukt for dette prosjektet er et intervju med et omfang på maksimalt én time, du vil være anonym, og det vil ikke være personidentifiserbare spørsmål. Opplysningene som samles inn, er rent knyttet til dine undervisningserfaringer og syn på den nye læreplanen angående digitale kilder og kritisk kildebruk. Opplysningene registreres ved lydopptak, og opptakene slettes når behandlingen av data er ferdig.

### Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

### Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

De som vil ha tilgang ved NTNU er student og veileder. Navn og kontaktopplysninger vil erstattes med en kode som lagres på egen navneliste adskilt fra øvrige data for å sikre at ingen uvedkommende får tilgang til personopplysninger, og lydopptak av intervjuet vil være tatt opp på lydopptaksmaskin eid av NTNU, og ikke på personlige system. Du som deltaker vil ikke gjenkjennes av de opplysningene gitt i publikasjon. Opplysningene som vil publiseres er rent knyttet til upersonlige data, og spørsmålene i intervjuet er i samsvar med og rundt forskningsspørsmålet.

### Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Opplysningene anonymiseres når prosjektet avsluttes/oppgaven er godkjent, noe som etter planen er mai 2022. Alle opptak blir slettet når prosjektet avsluttes og datamaterialet er anonymisert.

### Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til:

- innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene,
- å få rettet personopplysninger om deg,
- å få slettet personopplysninger om deg, og
- å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

### Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra NTNU har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Hvor kan jeg finne ut mer?
Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:
NTNU masterstudent Petter Fløttum Bjerkaker på e-post: xxxxxxxx eller på telefon
XXXXXXX
Prosjektveileder Eir-Anne Edgar på e-post xxxxxxxx eller på telefon xxxxxxxx
Vårt personvernombud: Thomas Helgesen xxxxxxxx
Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:  • NSD – Norsk senter for forskningsdata AS på epost ( <u>personverntjenester@nsd.no</u> ) eller på telefon: 55 58 21 17.
Med vennlig hilsen
Eir-Anne Edgar Petter Fløttum Bjerkaker (Forsker/Veileder)
Samtykkeerklæring
Jeg har mottatt og forstått informasjon om prosjektet «How are Norwegian EFL High School teachers guiding their students when working with digital text and its varying reliability?», og har fått anledning til å stille spørsmål.
Jeg samtykker til:
□ å delta i intervju og lydopptak
Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet

(Signert av prosjektdeltaker, dato)



