Surfing the past: digital learners in the history class
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Chapter 4

Methodological Introduction to Field Research

Since the coming of the Web and its gradual integration into the educational system, particularly during the first decade of the 21st century, many surveys have been conducted into the use of digital media in schools. Some were conducted on a yearly basis,\textsuperscript{143} while others were conducted on demand,\textsuperscript{144} or occasionally within universities or research institutes.\textsuperscript{145} Most of these studies and surveys were essentially quantitative, in the sense that they mostly aimed at mapping the extent to which digital media are used in educational settings. The second part of my research is an attempt to provide an ethnographic account of the uses of digital media and resources in the history class, an account that could serve as a follow-up to the above-mentioned quantitative and performance-oriented studies. The target group is constituted of 13- to 14-year-old secondary school pupils attending two selected classes. Being aware of the fact that the presentation of the results of field qualitative or ethnographic research is closely linked to the methodology and methods used at each phase of the research (Hutjes & Van Buuren, [1992] 1996: 102; Wester & Hijmans, 2003: 7), I shall first explain my methodological approaches. I made use ethnographic research and case study research, but before discussing how I did this, I shall first introduce the research questions and assumptions that I was exploring. I shall then focus briefly on the two techniques that I used most, namely, participant observation and interviews. Finally, I shall explain the context in which I used content analysis to study pupils’ written class assignments and the reason for choosing it, and then end the chapter with a description of the recording techniques I used.

\textsuperscript{143} Example: \textit{Vier in Balans Monitor} by Kennisnet Foundation.
\textsuperscript{144} Example: \textit{Internet, een populair medium voor het zoeken van informatie bij schoolopdrachten: Een onderzoek onder scholieren van 12-17 jaar}, (18 April 2006), by Motivaction.
\textsuperscript{145} Examples: Joke van Velzen’s \textit{Instruction and Self-Regulated Learning: Promoting Students’ (self-) Reflective Thinking} (PhD dissertation, Leiden University, 2002); and Jannet van Drie’s \textit{Learning about the past with new technologies} (PhD dissertation, Utrecht University, 2005).
4.1 Research Questions

We know well enough that experiment is always influenced by the hypothesis which occasioned it, but I have for the time being confined myself strictly to the discussion of facts. Moreover, for teachers and all those whose work calls for an exact knowledge of the child’s mind, facts take precedence over theory. I am convinced that the mark of theoretical fertility in a science is its capacity for practical application (Piaget, [1926] 1959: xix).

In the previous two chapters, a number of assumptions were mentioned regarding the import of the Web and digital media in general in history classes. The same assumptions also appear in the abundant literature on the use of digital media in the classroom. Research methodology literature has suggested not only that researchers are connected to the subject of their enquiry (Davies, [1998] 2008: 3-4), but also that the implication of that connection is that researchers enter the field with a number of philosophical and theoretical assumptions. It has been suggested that ‘Good research requires making these assumptions, paradigms, and frameworks explicit … and, at a minimum, to be aware that they influence the conduct of inquiry’ (Creswell, 2007: 15). My own assumptions emerged from my graduate research\textsuperscript{146} as well as from my extensive reading of expert and scholarly literature on the subject.\textsuperscript{147} In this section, I want to introduce the central question I explored: how do pupils interact with digital media and resources during their history classes? I explored it by dividing it into a number of sub-questions related to three of the most frequently recurring assumptions. These assumptions served as the axes around which my observations revolved.

The first assumption was that \textit{digital media and resources have made the history class more attractive and livelier} (Onderwijsraad, 1998: 9-10; Wilschut \textit{et al.}, 2004: 200-212; Kennisnet, 2009: 63). My aim in considering this assumption was not to check whether or not it was founded, but rather, based on my observations, to describe what happened when one medium was used in one way, and what changed when a medium was used in a different way. Some of the sub-questions that the next two chapters will answer are: what happened when the teacher used Web-based resources to illustrate a particular point? What happened when a pupil shifted from the

\textsuperscript{146} This was the subject of my MA thesis entitled ‘The Memory of the Netherlands: Introducing Cultural Heritage into the New Teaching-Learning Environment’ (University of Leiden, the Netherlands: 2006).

\textsuperscript{147} That literature includes: Wilschut \textit{et al.}, 2004; Haydn & Counsell (eds.), 2003; Harwood & Asal, 2007; Washington, 2008; Oomen, 2003; Roegiers & Truyen, 2008; Ten Brummelhuis, 2006; among others.
textbook to a Web page or vice versa in order to check a point in which he or she was interested? How did pupils respond when the teacher played a video clip during the lesson?

The second assumption was that digital media and resources foster historical thinking (Wilschut et al., 2004: 210; Van Drie, 2005: 63-87; among others). Historical thinking is defined here from the perspective of cognitive and development psychology rather than from that of professional or academic history.\footnote{At this stage it is crucial to remember the distinction psychologists have made between children’s or adolescent thinking and expert thinking. While expert historians employ heuristics such as corroborations, contextualisation and author identification to understand not only what the documents say but also what they mean (Wineburg, 1991: 77; Wolfe & Goldman, 2005: 470-471), adolescents often do not discuss the relationship between evidence and opinion but rely mostly on their own judgment of plausibility (Wolfe & Goldman, 2005: 472; see also Torney-Purta, 1994: 104). Despite this distinction, adolescents often show some features of expert thinking such as contextualisation (Torney-Purta, 1994: 108) and establishing connections between information across multiple texts (Wolfe and Goldman, 2005: 496). ‘The difference is, then, that children execute this process … less skillfully than professional scientists ...’ (Kuhn, 2009: 168-169). Similar observations have been made with regard to scientific thinking (Lawson, 1995: 42-67).} I shall use this concept within the framework of children’s thinking, which psychologists Robert Siegler and Martha Wagner Alibali ([1986] 2005: 2) defined as involving ‘the higher mental processes: problem-solving, reasoning, creating, conceptualizing, remembering, classifying, symbolizing, planning, and so on’. The adjective ‘historical’ adds the fact that the object of problem-solving, reasoning, creating and other mental processes is [in] the past. Thus, historical thinking in this sense includes, or is interchangeable with, other concepts used to describe this type of mental activity such as historical reasoning, historical literacy, historical consciousness, among others (Van Drie & Van Boxtel, 2008: 88; see also Lee, 2007: 50-51). These concepts imply that the learner goes beyond ‘names and dates’, to engage with, and question, historical texts [in the larger sense] in search of sub-texts (Wineburg, 2001: 76, 78, 80 & 82). Thinking or reasoning historically consists of reading historical texts not with a ‘receptive spirit’ but ‘with a question in [his] mind’ (Collingwood, [1946] 1994: 269-270; see also Watts, 1972: 20; Van Drie & Van Boxtel, 2008: 90-91), whereby the thinker often has recourse to, among others, associational, analogical, comparative, deductive, inductive, and creative thinking (Watts, 1972: 38; Van Drie & Van Boxtel, 2008: 89; Kuhn, 2009: 159-160 & 162-163).

I also used the concept of historical thinking in the sense of cultural historian Johan Huizinga’s (1948: 566) notion of ‘historical sensation’. When one experiences historical sensation, he suggested,
one has ‘contact with the past’ and gets ‘an (please resist the urge to laugh) ecstatic sensation of no longer being myself, of flowing in the world outside myself’ [parenthesis in original]. This experience is an instance of children’s thinking applied to a past event and is thus a form of historical thinking. According to constructivism theorists, digital media foster that process, especially critical thinking, argumentation, concept mapping, and the personal construction of knowledge (Kanselaar et al., 2000: 72). Others suggest that the main goal of education has ceased to be the assimilation of teacher-transmitted facts and has become, among other things, ‘learning to think’, which includes such skills as ‘analogical reasoning’, ‘critical thinking’, and ‘logical thinking’ (Simons et al., 2000: 13-14). Some of the sub-questions relating to this aspect are dealt with in the next two chapters: How did pupils engage with, and question, Web-based historical texts? How creative were they while dealing with Web-based texts either during the lesson or when doing their assignments? How did the different forms [text, still or moving images] of digital media inspire their discussions and argumentations?

The last assumption was that digital media and resources provided pupils [and teachers] with an unlimited variety of sources (Steyaert & De Haan, 2001: 70; Oomen, 2003: 12; Onderwijsraad, 2003a: 12-13; Wilschut et al., 2004: 200-212; Cornu, 2004: 40; Barton & Levstik, 2004: 2; among others). Until recently, the main history class sources are said to have been textbooks, on the basis of which other sources were sought, e.g., documentaries, excursions and class guests. As the 21st century dawned, the voices of scholars were heard calling for a system in which a dwindling amount of time would be devoted to teacher–pupil interaction. They suggested a system in which an increasing amount of time would be dedicated to pupils’ independent study ‘supported by a rich variety of information sources’ (Steyaert & De Haan, 2001: 70.Italicisation is mine). This change would mark a shift ‘from classical lessons to the studiehuis [study house]’, from ‘knowledge to skills, or learning to learn’ (Ibid.; see also Van Diepen-Oost, 2000: 40; Wilhelm, 2001: 13; Van Velzen, 2002: 6 & 44; Leek & Slot, 2006: 157). Thus, the next two chapters will attempt to answer these as well as other sub-questions: Which sources did pupils use and what were the reasons for their choices? Why did they use those sources rather than others?
4.2 The Case Study Approach

Working hypotheses are being confronted with masses of details, and as a result are discarded, revised, or quickened. You strive to compel the material facts of the world to reveal their nature, you watch and record their behaviour, and truth is the accurate statement of the facts observed (Baldwin, [1925] 1937: 89).

To explore the above-mentioned assumptions, I conducted field research in the form of case studies. I observed one class at the *Baarnsch Lyceum* in Baarn between January and May 2010 and another class at *Helen Parkhurst Dalton School* in Almere from March to May and from September to October 2010. I explain how the two schools were chosen at the beginning of the chapters [5 and 6] relating to each of the case studies. For the time being I would like to discuss the case study as a research approach, guided as it is by, among others, the principle that the fewer cases one studies, the larger the amount of detailed information one collects: ‘usually, “case study” refers to research that investigates a few cases, often just one, in considerable depth’ (Hammersley & Gomm, 2000: 3).

Although the results of my two case studies make no pretension to being a reflection of the general situation in Dutch secondary schools, they could provide some insightful indications. As indicated by methodologist Jan Hutjes (2000: 78), case studies do not always aim to produce generalisable results. For his colleagues Yvonna Lincoln and Egon Cuba (2000: 27), generalisation is even out of question when one is dealing with case studies: ‘The only generalization is: there is no generalization’. In my case, the results are limited to the two classes I observed and to the specific period of my field research. In other words, by opting for the case study approach, my aim was to reach an ‘understanding or explanation of a phenomenon [uses of digital media and resources] in its unique context [history class, not in all imaginable contexts]’ (Hutjes & Van Buuren, [1992] 1996: 25). The point being made here is that the case study, though limited in time and space, can provide an insight that may be useful for further, broader research. I selected two cases and went deep, ‘by placing the complex relationships in which the case[s] function[s] at the heart of the research’ (Wester, 2000: 20; see also Creswell, 2007: 73 & 74; see also Hutjes & Van Buuren, [1992] 1996: 21 & 24). In addition to this depth, Jan Hutjes and Hans van Buuren ([1992] 1996: 15) highlighted the ‘intensive study of a phenomenon in its natural situation’ and ‘from different perspectives’ (*Ibid.*: 77). In such a study, they added, data are collected using such methods as participant observation, interviews, document analysis,
with or without a quantitative and/or qualitative approach (*Ibid.*: 79-93). The next five sections discuss the data collection approaches and methods I used.

4.3 Ethnographic Perspective on the History Class

... as soon as age permitted me to emerge from the control of my tutors, I entirely quitted the study of letters. And, resolving to seek no other science than that which could be found in myself, or at least in the great book of the world, I employed the rest of my youth in travel, in seeing courts and armies, in intercourse with men of diverse temperaments and conditions, in collecting varied experiences ... For it seemed to me that I might meet with much more truth in the reasoning that each man makes on the matters that specially concern him ... I learned to believe nothing too certainly of which I have only been convinced by example and custom (Descartes, [1637] 1996: 8).

For my field research, I made use of ethnographic methods for the two case studies. In this section, I want to highlight the features and aspects of ethnography that I found most relevant to the specific purpose of my field research. Originating from anthropology, ethnography or qualitative research is essentially fieldwork-based (Creswell, 2007: 37), and it aims primarily at describing and understanding a culture from the native point of view (Spradley, 1980: 3; see also Atkinson & Hammersley, 1994: 251; Wester & Hijmans, 2003: 9). Three key criteria need to be taken into account: first, the research has to place the 'inner world' of the subjects being studied at the centre; second, the relationships between the concepts and data to be collected must be – and remain – open; and third, the researcher must establish the broadest and most direct possible contact with the reality of the world under consideration (Wester & Hijmans, 2003: 11-12; see also Creswell, 2007: 39). Suggesting more specific ways in which ethnography could be used in observing classrooms, education scholar Edward Wragg ([1994] 1999: 54) noted that it offers numerous approaches 'to probe beneath the surface of events, to elicit the meanings, sometimes deeply buried, the interpretations and explanations, significance and impact of classroom life.'

For the purpose of my research, I opted to embrace ethnography as my main methodological approach to the use of digital media and resources in the history class. To paraphrase Wragg, I wanted to probe beneath the yearly statistics-based reports on digital media
uses, to elicit the meaning, the interpretations, and the explanations of certain uses of digital media and resources, rather than merely the extent to which they were used. Although essentially qualitative and descriptive, my approach did not systematically exclude quantitative data where these were deemed necessary (see below Section 4.6). Following Wester (1984: 4; see also Hutjes & Van Buuren, [1992] 1996: 9 & 77; Hardy & Bryman, 2004: 1 and 4; Creswell, 2007: 131), my qualitative approach took some advantage of the quantitative data collected in the two classes, for instance, by using them to illustrate hypotheses.149

Since the aim of my field research was, in the words of Agar ([1980] 1996: 30), to ‘seek the here and now’ in terms of pupils’ attitudes and behaviour vis-à-vis digital media and resources, I needed to see the pupils as often as possible and for a certain period of time. I should therefore mention the fact that my field research consisted of weekly, sometimes bi-weekly, attendance at the history class in both schools, where I would sit among the pupils, adapt myself to the prevailing code of conduct and avoid making my presence too intrusive (Wragg, [1994] 1999: 16). I would then observe pupils (see next section), talk to them whenever the occasion presented itself and have informal conversations with teachers (see Section 4.5).

4.4 Observing while Attending

In front of my window is a mound on which the children of the neighbourhood gather to play. Although a bit far from me, I can perfectly distinguish all they say, and I often draw good illustrations [from that experience] for this account (Rousseau, [1768]1966: 83).

In this section I want to focus on the technique – participant observation – that I used most in order to collect data. Of all the qualitative research methods, participant observation has often been preferred as it increases the chance of understanding other cultures (Silverman, 1993: 8-9). However, it needs other methods in order to clarify the phenomena observed – for instance interviewing (see next section) –, to analyse media contents (see Section 4.6), and to record data (see Section 4.7), among others. I chose participant observation as the primary method because, in my opinion, it was

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149 Melissa Hardy and Alan Bryman co-edited *Handbook of Data Analysis* (2004), a volume that includes both quantitative and qualitative techniques. Their aim, so they wrote, was to contribute to bringing the two approaches closer together because ‘We believe that reinforcing this division is a mistake’ (Hardy & Bryman, 2004: 1). They further argued that both approaches have much to gain from one another, as they both ‘attempt to “tell a story” from the data’ (Ibid.).
best suited to my goal of ‘understanding the [pupils’] routine [with regard to digital media]’ (Silverman, 1993: 30). Participant observation has been defined as

a method in which a researcher takes part in the daily activities, rituals, interactions, and events of a group of people as one of the means of learning the explicit and tacit aspects of their life routines and their culture … (DeWalt & DeWalt, 2002: 1).

Depending on the extent of involvement in daily routines, many degrees of participant observation have been distinguished, namely non-participation: the observer is not involved in the activities of the subjects studied; passive participation: the researcher does not get him- or herself involved to a great extent but acts as a ‘bystander’; moderate participation: ‘the ethnographer seeks to maintain a balance between being an insider and an outsider’; active participation: the ethnographer does what everybody else does; and complete participation: the highest level of participation on the part of the researcher (Spradley, 1980: 58-61). I opted for observation based on moderate participation, limiting my participation to chatting with pupils before classes started or during group discussions. I joined group discussions not to contribute but to follow and take notes. I would ask questions about points raised during discussions, or about a website the pupil was browsing. My principal role as observer consisted of sitting among the pupils and taking notes of what I saw and heard. This method has been described as being used most frequently for classroom observation, whereby researchers are ‘principally [as] observers, not [as] participants’ (DeWalt & DeWalt, 2002: 20).

To make this moderate participation possible would require me to build a relationship based on trust with the pupils, whose full cooperation I would need in order to conduct my research successfully (see Fine & Sandstrom, 1988: 16). Winning their trust would transform me into an insider, a phenomenon referred to as ‘resocialisation’ (Wester, 1984: 56), an essential aspect of participant observation. Resocialisation means that ‘One has to go through a learning process that is similar to the process each new member goes through before being fully accepted as a member’ (Ibid.). Thus, my trust-building efforts started with my introduction on day one, when I had to explain to the pupils who I was and why I had decided to come and sit among them. At the Baarnsch Lyceum, this process even continued during breaks when I had to explain the difference between myself and teacher-trainees, to whom they were accustomed.

The pupils tested my knowledge of their world, in what appeared to be some form of admission test. They tested my knowledge of local Dutch football championships, and the UEFA [Union
of European Football Association] Champions League, asking about my favourite clubs and asking me for prognoses for upcoming matches. I later received ‘condolences’ when Internazionale of Milan eliminated FC Barcelona, my ‘favourite’ for the 2010 Champions League tournament. I had the impression that I had passed their test and that some degree of trust had been established. Throughout my research, I would make comments on football before introducing my research-related questions, as football − and to some extent political news − appeared to be a topic of great importance to them. It served as a door into their world. Observation has taught that the first few weeks of child observation are crucial to the success of the research, because this is the period in which children test the researcher (Fine & Sandstrom, 1988: 29). To pass the test, one needs to develop certain behavioural and social skills as well as a flexible approach to new social situations (DeWalt & DeWalt, 2002: 17). In my case, I was already well informed both about football and about political news, which made that task much easier.

Though I achieved the status of ‘trustworthy fellow’, it was not possible to be a loyal fellow under all circumstances. At the Baarnsch Lyceum, pupils would sometimes offer me a chewing gum during the lesson and I felt obliged to decline the offer. Others would urge me to glance at a Web page to which they had browsed on their iPhones while they were supposed to be listening to the teacher, and I would silently reject the invitation. This limitation highlighted the difference between the status of ‘trustworthy fellow’, which I had, and that of ‘peer’, which the pupils thought I had. It was a matter of exploring their world, while establishing a balance between involvement and distance (Wester & Hijmans, 2003: 13-14).

I should add that I was fully aware that a number of aspects would prevent, or at least hinder, my full integration into the group. In the first place, I was an adult among minors; secondly, with my swarthy complexion, having come from a different continent – Africa – and speaking not-quite-perfect Dutch with an accent, I was attending classes that were predominantly white; thirdly, I had

150 Several political events occurred during the time I spent observing the Baarnsch Lyceum class [January–May 2010]: in February 2010 the government resigned after a profound disagreement among coalition parties. Pupils would comment on the numerous televised political debates. In the same period, polls prior to the March 2010 municipal elections were predicting victory for the recently established extreme-right Partij voor Vrijheid [Party for Freedom, PVV]. Pupils seemed excited about this.

151 In her 2007 article entitled ‘Friend or Foe? Self-Expansion, Stigmatized Groups, and the Researcher-Participant Relationship’, public policy scholar Jocelyn Crowley cited many instances in which the status of ‘trustworthy fellow’ reached its limits. She managed to collect private information from the studied subjects but systematically refrained from providing private information about herself.
landed in the second year of secondary school, though my world was that of academia. Neither at the Baarnsch Lyceum nor at the Helen Parkhurst Dalton School did these differences seem to play any noticeable role. However, questions about the languages I spoke [implying my origin and background] or the kind of book I would be writing [academia], showed that the pupils were, nevertheless, aware of these differences. The most decisive step toward compensating for these differences was by getting as close to their worldviews as possible.

4.5 Interviews

To judge children's logic, it is often enough to chat with them ... (Piaget, 1938: vii).

The ethnographic or qualitative research interview has been defined as a technique that 'employs questions designed to discover the cultural meanings people have learned' (Spradley, 1980: 123; see also Kvale, 1996: 1). The technique differs from everyday conversation in that it has a purpose and 'goes beyond the spontaneous exchange of views ... and becomes a careful questioning and listening approach with the purpose of obtaining thoroughly tested knowledge' (Kvale, 1996: 6; see also Oppenheim, [1966] 1992: 66). Not all interviews have the same structure. Three major sorts of interview have been distinguished: the unstructured interview, during which the researcher 'presents topics in an open-ended way and exerts as little control over the interaction as possible'; the semi-structured interview, during which the researcher uses an interview guide to ensure that all topics are covered; and the structured interview, during which the researcher uses scripted questions (DeWalt & DeWalt, 2002: 122). Whatever type of interview one chooses to use, interviewing remains one of the most important tools for field researchers. Agar ([1980] 1996: 95) maintained that 'For the ethnographer, question asking is vital' in order to learn from a group and to check things that you think you understand. His conclusion is that '[E]thnography without questions would be impossible'.

During my field research I conducted dozens of unstructured interviews with the pupils. In all cases, my questions were inspired mainly by my observations, hence the unstructured, spontaneous nature of the interviews. Agar ([1980] 1996: 158) further suggested that observation and interview interact 'either simultaneously or sequentially, in the course of doing ethnography'. During the field research, some of my interviews were simultaneous with ongoing activities, since questions were about something that was happening; others were sequential, as they were conducted after the situ-
ation had passed [after the lesson for instance]. At one school, the Helen Parkhurst Dalton School, where moving around from one place to another – inside and outside the classroom – was part of the learning style and did not violate any code of conduct (see Chapter 6, Section 6.1), I would sometimes join an individual pupil who was consulting a particular Web page and ask how he or she had come to that source, and how he or she intended to use the information found there. At the other school, the Baarnsch Lyceum, where the learning style was very different and did not permit free movement during lessons, I would generally put my questions to pupils either at the end of the lesson or in advance when a teacher was getting ready to start a lesson. For instance, when a teacher made a remark to a pupil, saying he or she had not made joint use of book and Web sources as he had requested, I would ask the pupil why he or she had not complied with the request.

Interviewing teachers was a different matter, and thus, required a different interview technique. I would write down questions that came to my mind in relation to the lesson being given. Asking questions as they rose [unstructured interview] would have been too disruptive for the teacher. I would organise my questions into a semi-structured interview to be conducted after the lesson, or one week later, before the following lesson began. I call these interviews semi-structured because I determined the topics upon which I wanted the teachers to elaborate prior to the interview. Eventually, the answers teachers gave would prompt other questions, hence the semi-structured character. In the next few paragraphs I briefly introduce my approach to content analysis, another method I used at a later stage of my field research.

4.6 Content Analysis


The literature on content analysis suggests that choosing the variables on which an analysis should be based is an essential starting point for content analysis (see for instance Neuendorf, 2002: 4 & 95; Bryman & Cramer, 2004: 17). It has been suggested that any content analysis ‘is a selective reading of [media] material from the perspective of a specific research question’ (Wester, 2006: 16; see also Pleijter, 2006: 13). The media texts in which I was interested

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152 In this respect, Piaget (1938: xiv) also suggested that observations complement one another: ‘there is, in fact, no a priori reason why one should not question the children about the points which pure observation leaves unclear’.
were the written assignments done by the pupils in the two classes I had observed. I would like to explain briefly how I approached those texts using content analysis, which, unlike observation and interviews, involves no ‘intrusion’ of the researcher in the process through which media contents come into being (Wester, 2006: 11-12).

Content analysis has been briefly defined as an organised and empirical study of media materials or messages (Neuendorf, 2002: 1; Pleijter, 2006: 7) that has been often, though not exclusively, used in analysing mass media texts.¹⁵³ Media texts in this sense are to be understood as media contents, including radio and television programmes.¹⁵⁴ Content analysis is also used for other kinds of contents outside the realm of mass media. Neuendorf’ (2002: 17) indicated that ‘so long as other pertinent characteristics apply … the study of any type of message pool may be deemed a content analysis’ [Italicisation is mine]. From this point of view, notes, meeting reports, court judgements, ego documents [e.g., diaries], hospital or school archival documents, to name a few, are all eligible for content analysis (Wester, 2006: 11 & 31). In my case, the classes’ written assignments formed the object of my content analysis. These assignments were carried out during the period of my field research. I should add that I did not exercise any influence whatsoever in designing the assignments. The teachers were even not aware of the specific assumptions [relating to historical thinking and variety of sources] I was exploring on the basis of the written assignments. The material in which I was interested came into being without any involvement on my part: ‘thus’, as Wester (2006: 17) suggested, I waited to ‘see whether or how the aspects to be studied [would] appear in the document’.

I should also mention that I used two content analysis approaches, one to explore the variety of sources used by the pupils and another to study their historical thinking. In the former case, I used the ‘quantitative, descriptive type of content analysis’ (Wester, 2006: 20), which aims primarily at obtaining figures and statistics on how a given aspect appears in media contents. Since my research was on a small-scale, I did not need the coding schemes or agents that are usually used for large-scale research. This approach appeared to be

153 Critics Edward Herman and Noam Chomsky’s Manufacturing Consent: The Political Economy of the Mass Media (1988), and political communication scholar Piers Robinson’s The CNN Effect (2002), are illustrations of content analysis as applied to mass media texts.

154 Sociologist and methodologist Ellen Hijmans (2006: 121-138) for instance carried out a content analysis of the Oprah Winfrey Show, to explore its ‘spirituality’. Her colleagues Fred Wester and Addy Weijers (2006: 161-189) conducted a similar analysis of TV shows to make an inventory of ‘life lessons’.
the most appropriate since the notion of variety of sources refers to the number of sources used. If one pupil used ten different sources, while another used only two, the former is said to have used more varied sources, based on the number of sources he or she actually used. I also provided an account of the use of sources, their categories and the relationships between them and the use of, for instance, long quotations, summaries, and paraphrasing. In this regard, sociologist Melissa Hardy (2004: 35) suggested that ‘[W]hen we work with a data set, our goal is to tell its story – or one of its stories’, while her colleague Roberto Franzosi (2004: 556-557) argued that ‘By themselves, of course, numbers mean nothing’, as they ‘need to be analysed … [and] converted back into words to make them intelligible’. The ultimate goal, he wrote, is ‘to discover patterns in the data’ (Ibid.: 562).

To study historical thinking, I used the ‘qualitative, interpretive type of content analysis’, which is characterised by ‘intensive study of documents’ by the researcher him/herself, without any use of coding schemes or coding agents (Wester, 2006: 26-27). Its aim is to explore or describe a central concept [historical thinking], taking into account the background and the context in which the document came into being (Ibid.: 32). As historical thinking is an abstract notion involving more than just one aspect (see Section 4.1), I attempted to study the assignments carefully to detect whether – and if so, how – digital media or resources interfered with the thinking processes that led to the arguments presented in the assignments.155

Thus, unlike the quantitative, descriptive approach used to study sources, the qualitative, interpretive counterpart focuses on the how rather than the how many. Sociologist and methodologist Ellen Hijmans (2006: 121-138) used this content analysis approach to explore ‘spirituality’ in the Oprah Winfrey Show. The aim of her research was ‘to show how the rather considerable theoretical relationship between the talk show and spirituality receives empirical stature in the Oprah talk show’ (Ibid.: 123. Italicsation is mine). Fred Wester and Addy Weijers (2006: 161-189) conducted a fairly similar analysis of TV shows in order to make an inventory of ‘life lessons’. The point was to use narrative analysis to ‘dissect television stories’ in search of their ‘cultural message’, and how this manifested itself both verbally and through gestures. The stress was more on how the cultural message manifested itself than on how many times

155 Communication scholar Alexander Pleijter (2006: 16-19) sketched the trends in qualitative content analysis, highlighting the influence of hermeneutics, semiotics, narrative and discourse analysis, as well as the study of religious texts, among others. These influences make it possible to have recourse to different kinds of interpretive approaches.
it appeared in a given TV show. To reuse the same terms used by Wester and Weijers (*Ibid.*: 162), I used this qualitative, interpretive approach to ‘dissect’ the written assignment in order to see how historical thinking manifested itself as a result of using the Web.

### 4.7 Data Recording

An ethnographic record consists of fieldnotes, tape recordings, pictures, artifacts, and anything else that documents the social situation under study … The major part of any ethnographic record consists of written fieldnotes (*Spradley*, 1980: 63-64).

To record data, I mainly took notes and made recordings, both video and audio, as well as taking hundreds of pictures. I should stress here that at the *Baarnsch Lyceum*, I was faced with a particular challenge relating to the use of recording devices. As Chapter 5 will show, the class was a conventional one, where on the one hand the teacher strove to maintain silence in the class, while on the other hand, the adolescents never missed an opportunity to take out their digital devices during the lesson. In this environment, to have taken out my own recording devices would have provided the pupils with yet another pretext to wreak ‘havoc’ in the classroom. As I wanted to avoid diverting pupils’ attention from the teacher to my recording devices, I decided not to openly use any recording tool, resorting instead to field notes [to be certain of having *verbatim* messages and exchanges]. I was nevertheless able to take some pictures and make a few videos, though only from the back of the classroom, from where I was generally able to operate unnoticed, and thus without disturbing the class.

The situation at *Helen Parkhurst Dalton School* was entirely different. As Chapter 6 (Section 6.1) will show, the class was saturated with digital technologies: all pupils had their own notebook [laptop computer] and they were free to use their private devices [iPod with earphones, iPhones, *etc.*] during lessons. Making use of my recording technologies was a natural thing to do. No one seemed to have even noticed them. Thus, I used my own laptop [like everyone else in the class] to record ‘everything’ that was said in class. I also had a pocket sound recorder which I used for informal talks with pupils inside the classroom, or with the teachers outside the classroom. My video camera was permanently switched on, recording ‘everything’ that happened in the classroom. I also used my photo camera to take a number of pictures.
Ethnography methodologists agree that note-taking is the most typical data recording method (Davies, [1998] 2008: 233; see also Spradley, 1980: 63-64; Kvale, 1996: 160-161). It has even been suggested that the success of qualitative research based on participant observation – as in my case – depends entirely on the quality of the researcher’s notes (Wester, 1984: 58). Anthropologists Kathleen DeWalt and Billie DeWalt (2002: 122) added that besides taking on-the-spot field notes, the researcher should try ‘to remember verbatim passages of conversations, and record[s] those in field notes’. Thus, note-taking was my primary and most important recording technique.

I also took digital pictures and made video recordings. The aim was to capture certain attitudes and interactions of pupils, ones that would otherwise have been difficult, if not impossible, to describe in words. However, photography as a data-collecting method has been criticised, mainly because ‘a camera does not record what the ethnographer sees and hears, but a mechanically limited selection of it’, excluding all that is not in front of its lenses (Davies, [1998] 2008: 133-134). Moreover, there is the risk of manipulation through staging (Ibid.). Despite these grounded criticisms, I found photography an invaluable method for capturing pupils’ interactions with digital media, the ways they engaged in digital-media-driven multitasking and such things. The pictures, together with the written descriptive account, provide a much richer image of the use of digital media in the history class. At the Baarnsch Lyceum in particular, video recording helped to capture the attitudes and behaviour both before and during the projection of Web-based videos. Educational psychology and qualitative research theorist Steiner Kvale (1996: 160-161; see also Clayman & Gill, 2004: 592) postulated that video recording is unique in capturing not only interpersonal interaction, but also ‘facial expressions and bodily posture’.

In short, I recorded data mostly by taking field notes [observations, discussions, interviews with children and teachers] as well as [only occasionally for the Baarnsch Lyceum case study] by taking still and moving images, and recording interviews. Lastly, I should add that I am aware of the foreseeable criticism of my data recording at the Baarnsch Lyceum, where I purposely decided to use neither audio nor video [the latter only occasionally and in a few cases] recording devices. The reason was that the research milieu was ‘hostile’ to their use. The use of recording devices would have hindered my smooth integration into the group.
4.8 Summary

The aim of this short methodological chapter was twofold: to frame the central research question – how do pupils interact with digital media during their history class? – which I decided to explore based on three assumptions or hypotheses raised in existing literature on the subject. I have explained that I opted for an ethnographic approach, applying it to two case studies. My interest was much more in understanding, describing, and subsequently interpreting the uses of digital media and resources by the selected secondary school pupils. Within this approach, I decided to be a moderate participant observer, by sitting among the pupils and following their exchanges, their interactions with teachers and digital media, and conducting unstructured interviews with them. The latter technique proved efficient in the sense that it kept the exchanges natural. My interaction with teachers mainly took the form of semi-structured interviews. I mentioned how I strove to win the pupils’ trust while at the same time refraining from becoming their peer. I discussed the context within which I used content analysis to explore two variables – historical thinking and variety of sources – in pupils’ written assignments. Finally, I briefly introduced the field data collecting techniques I used, namely note-taking, sound and video recording, and photography. In the next three chapters I first discuss Case Study One (Chapter 5) and Case Study Two (Chapter 6) and then I provide my analysis of the findings of the two case studies (Chapter 7).